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Vol. I

TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1939

No. 380

ALFRED A. MAURER AND MARCUS W. MYERS, TRADING AS MAURER & MYERS AUTO CONVOY, APPELLANTS,

vs.

WILLIAM J. HAMILTON, JR., SECRETARY OF REVENUE OF THE COMMONWEALTH OF PENNSYLVANIA, ET AL.

APPEAL FROM THE SUPREME COURT OF THE COMMONWEALTH OF PENNSYLVANIA

FILED SEPTEMBER 12, 1939.

INDEX TO RECORD

VOLUME I

I. Relevant Docket Entries 1a

II. Pleadings:

(1) Bill in Equity 3a

Decree Awarding Preliminary Injunction 9a

(2) Answer 10a

III. The Evidence:

Admitted Pleadings 23a

Hearing of Nov. 8, 1937

PLAINTIFFS' EVIDENCE

	Direct Ex.	Cross Ex.	Redirect Ex.	Recross Ex.
Guy S. Mordan	35a	42a	43a	49a
			63a	64a
William Lawrence	65a	75a	80a	81a
			81a	82a
John G. Reeser	83a	91a		
Alfred A. Maurer	91a	98a	104a	105a
George I. Mordan	106a	109a		
George S. Thompson	112a	122a		
Lynn M. Francis	126a	138a	143a	144a
			156a	
Percival Stubbs Thornton	156a	159a	160a	160a
Henry Willig	161a			
Joseph R. Trew	161a	163a		
C. M. Boutell	164a	172a	183a	184a
			186a	
S. H. Alpert	186a	190a		
D. F. Burkhardt	192a	193a		
Frank Tiffenbaugh	195a	197a		
Leslie Reeser	199a	201a		
P. G. Doeffinger	201a			
Lawrence Wright	206a			

Defendants' Evidence

	Direct Ex.	Cross Ex.	Redirect Ex.	Recross Ex.
Joseph Vizian	210a	211a		
Charles C. Albright	215a	218a	222a	223a
Paul J. Roche	223a	229a		
Singleton Shaeffer	233a	234a		
	268a	269a		
Lester Mellinger	236a	237a		
M. F. Wilhere	238a	240a	241a	
Edward H. Crowthers	242a	243a	246a	
D. W. Anderson	247a	248a		
L. D. Jenkins	253a	258a		
W. J. Farra	261a			
J. J. Nori	263a	265a		
T. C. Mahalik	266a	267a		
Joseph J. DeSanto	269a	272a		
J. J. Tama	280a	281a		
	285a	288a	290a	290a
H. E. Jones	284a	285a		
Frank Schauble	290a			
Paul W. Danielson	292a	296a	299a	301a
			303a	
Harry Baroff	304a	305a		
John J. Norton	305a	307a		
Anton Van Hoff	308a	309a	311a	311a
Russell P. Brewer	312a	313a		
Henry F. King	315a	319a	322a	323a
C. P. Morris	325a			
Certificate of Stenographer				326a
Certificate of Court				327a

Hearing of Dec. 30, 1937

Defendants' Evidence, *Continued*

Harold P. Boss	328a	329a		
Howard Mitchell	329a	332a		
Alfred Baxter	333a	338a	342a	
Harry Edwards	343a	346a	351a	351a
Leroy Marshall	352a	353a		
Israel Kerson	354a	356a	357a	
August Ulmann, Jr.	358a			

Hearing of Dec. 31, 1937

DEFENDANTS' EVIDENCE, *Continued*

	Direct Ex.	Cross Ex.	Redirect Ex.	Recross Ex.
August Ulmann, Jr.	380a	394a	418a	421a
J. R. Duplanche	422a	423a		
W. L. Wolford	424a	426a	427a	
Raymond A. Blythe	428a	431a		
Albert H. Shuller	431a	433a		
REBUTTAL				
George R. Wellington	433a			
Jack S. Costa	436a	437a	439a	
Irving H. Judd	439a	461a	471a	
L. M. Francis	472a	475a		
Certificate of Stenographer				478a
Certificate of Court				479a
IV. Opinion				479a
Decree Nisi				498a
V. Plaintiff's Exceptions to Adjudication				499a
VI. Final Decree				523a

VOLUME II

EXHIBITS

PLAINTIFFS' EXHIBITS

No. 2	Interstate Commerce Commission Safety Regulations in Effect July 1, 1937	525a
No. 3A to 3G inclusive	Photographs of various types of car carriers, with specifications	526a-532a
No. 5	Accident frequency of car over the cab vehicle	533a
No. 6	Accident frequency two deck vehicle	533a
No. 7	Accident frequency of motor trucks other than car carriers	534a

No. 8 Blueprint showing tipping angle of car carrier on RT hookup 536a

No. 9 Blueprint showing tipping angle of tank type car carrier 537a

No. 10 Blueprint showing tipping angle of carrier with car on top 538a

No. 11 Blueprint showing center of mass of loaded three car carrier 539a

No. 12 Blueprint showing tipping angle of cargo body truck, not a car carrier 540a

No. 13 Blueprint showing center of mass of loaded cargo body truck 541a

No. 14 Photograph of car carrying equipment of F. J. Boutell Driveaway Co. 542a

No. 15 Photograph of car carrying equipment of F. J. Boutell Driveaway Co. 543a

No. 16 Photograph of car carrying equipment of F. J. Boutell Driveaway Co. 544a

No. 17 Photograph of car carrying equipment of F. J. Boutell Driveaway Co. 544½a

No. 18 Accident statistics of F. J. Boutell Driveaway Co. 545a

No. 19 Accident statistics of Central States Transit Lines 546a

No. 20 Number of cars transported by Central States Transit Lines to and through Pennsylvania and number of Pennsylvania dealers served 548a

No. 21 Number of cars transported by F. J. Boutell Driveaway Co. to and through Pennsylvania and number of Pennsylvania dealers served 548a

No. 22A to 22C incl. Photographs of commercial truck (not a car carrier) with cargo over cab 549a-551a

No. 23A & 23B Photograph of commercial truck (not a car carrier) with cargo over cab 552a-553a

No. 24A to 24C incl. Photographs of commercial truck (not a car carrier) with cargo over cab 554a-556a

No. 25A to 25D incl. Photographs of commer-

cial truck (not a car carrier) with cargo over cab 557a-560a
No. 26A & 26B Photographs of commercial truck (not a car carrier) with cargo over cab 561a-562a
No. 27A to 27D incl. Photographs of commercial truck (not a car carrier) with cargo over cab 563a-566a
No. 28 Copy of Order of Interstate Commerce Commission Ex Parte No. MC 15 ..... 567a
No. 29 Photograph of car carrying equipment 568½a
No. 30 Photograph of one type of car carrier tractor 568½a
No. 32 Determination of center of gravity of "Ill. Special" type of car carrier 569a
No. 33 Determination of center of gravity of stake body truck 570a
No. 34 Drawing showing loads on frame of "Ill. Special" type of car carrier 573a
No. 35 Sheets 1 to 4 incl. Determination of frame stresses of designated car carrier with stated load 574a

---

DEFENDANTS' EXHIBITS

C Photograph of W & K adjustable ramp on car carrier 578a
D Photograph of wreck involving a car carrier 579a
E Photograph of car resting on cab of carrier 580a
F Photograph of car on cab of carrier 581a
G Photograph of car on cab of carrier 582a
H Photograph of car on cab of carrier 583a
I Photograph taken in cab of carrier under car 584a
J Photograph of tractor designed to carry car on cab 585a
K Photograph of car on cab 586a
L Photograph of equipment designed to carry car on cab 587a

M	Photograph of equipment designed to carry car on cab	588a
N	Photograph of equipment designed to carry car on cab	589a
O	Photograph of equipment designed to carry car on cab	590a
P	Photograph of equipment designed to carry car on cab	591a
Q	Photograph of car on cab	592a
R	Photograph of equipment designed to carry car on cab	593a
S	Photograph of double deck car carrier	594a
T	Photograph of car on cab	595a
U	Photograph taken in cab under car carried	596a
V, W & X	Photographs of a section of highway	597a
Y	Photograph of a wrecked automobile	598a
Z	Photograph of a wrecked automobile	599a
AA	Photograph of wrecked car carrier	600a
BB	Photograph of section of highway	601a
CC	Photograph of wrecked car carrier	602a
FF	Copies of certain exhibits contained in applications filed by certain car carriers with Interstate Commerce Commission	603a
GG	Copies of certain exhibits and sketches contained in applications filed by certain car carriers with I. C. C.	627a
HH	List of makes of trailers of certain car carriers	639a
II	Diagram of forces on tractor with car loaded on cab	641a
JJ	Graph of centrifugal forces calculated for Figures 4 & 5	642a
KK	Figures 4 & 5 of tractor and loaded car	643a
LL	Figures 6 & 7 of car carrier and a loaded truck	644a
MM	Calculations of load on front axle for car carriers in Figures 3 to 6	645a
NN	Calculation of degree that driver's vision is obscured by car carried over cab in Exhibit "OO"	646a

OO Graphic illustration of interference with driver's vision by car loaded over the cab 648a

PP Calculations concerning tipping of specified loaded car carrier and truck with reference to curve having a radius of 100 ft. 649a

	Original	Print
Proceedings in Supreme Court of Pennsylvania	653	1
Docket entries	653	1
Petition of appellants for remission of record	670	656
Acceptance of service	682	665
Proposed order	683	665
Exhibit "A"—Petition for reopening before I. C. C., ex parte No. MC-4	684	666
Exhibit "B"—Report on further hearing recommended by R. W. Snow, examiner, ex parte No. MC-4	694	671
Order refusing petition to remit	705	678
Opinion, Barnes, J., and judgment	707	679
Petition for leave to substitute names of defendants and order allowing substitution	725	694
Petition in appeal to the United States Supreme Court, assignments of error and prayer for reversal	729	695
Order allowing appeal	733	697
Petition by appellants to the United States Supreme Court for injunction pending appeal, and order of Honorable Owen J. Roberts granting an injunction (omitted in printing)	784	
Citation and service	(omitted in printing)	797
Stipulation as to record on appeal	800	697
Clerk's certificate to record	(omitted in printing)	803
Judge's certificate to clerk	(omitted in printing)	805
Clerk's certificate to judge	(omitted in printing)	805
Bond on appeal	(omitted in printing)	806
Bond on injunction	(omitted in printing)	809
Statement of points to be relied upon and designation of parts of record to be printed	812	699

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—5152

RECORD—VOL. I.

IN THE COURT OF COMMON PLEAS
OF DAUPHIN COUNTY

Sitting in Equity

Alfred A. Maurer and Marcus W. Myers, trading as Maurer & Myers Auto Convoy, Plaintiffs,

v.

J. Griffith Boardman, Secretary of Revenue of the Commonwealth of Pennsylvania; P. W. Foote, Commissioner of the Pennsylvania Motor Police; and Charles J. Margiotti, Attorney General of the Commonwealth of Pennsylvania, Defendants.

Equity Docket No. 1308

Commonwealth Docket, 1937, No. 281

I.

RELEVANT DOCKET ENTRIES

Aug. 4, 1937, Bill, Injunction Affidavits and approved bond filed, same day Preliminary Injunction awarded as prayed and shall continue in effect until further order of court, see file.

Aug. 4, 1937, Issuance of Injunction waived and service accepted by Geo. Keitel, Depty. Atty. General, see file.

Aug. 17, 1937, Charles J. Margiotti, Esq. appears for Defendants.

Aug 17, 1937, Answer filed.
Sept. T. 1937, I. L.
Sept. 15, 1937, Cont'd.
Oct. T. 1937, I. L.
Jany. 27, 1938, Testimony filed.
Jany. 27, 1938, Testimony filed.
Febry. T. 1938 A. L.
Febry. 9, 1938, cont'd.
Feb. 4, 1938, Testimony filed.
March T. 1938, A. L.
Apr. 27, 1938, Deft's requests for findings of fact and conclusions of law filed.
Apr. 27, 1938, Plff's requests for findings of fact and conclusions of law filed.
Apr. 27, 1938, Opinion filed, same day decree nisi entered as follows:

> Apr. 27, 1938, this case came before the Chancellor, testimony was taken and argument heard. it is ordered, adjudged and decreed that the decree awarding a preliminary injunction to the plaintiff is dissolved and the bill of complaint is dismissed at plaintiff's cost. Unless exceptions be filed within 30 days from the filing of this decree a final decree will be awarded, see file.

May 7, 1938, Plaintiff's exceptions to adjudication filed.
June T. 1938, A. L.
Sept. 6, 1938, Exceptions are dismissed, see file.
Sept. 20, 1938, Certiorari Sur Appeal No. 20 May Term, 1939 from Supreme Court filed.
Sept 21, 1938, Approved bond filed.
Sept. 29, 1938, Order from Supreme Court refusing supersedeas filed.

II.

PLEADINGS

(1) BILL IN EQUITY

To the Honorable, the Judges of Said Court:

Alfred A. Maurer and Marcus W. Myers, trading as Maurer & Myers Auto Convoy, bring ths bill on their own behalf and on behalf of such other parties as might desire to intervene as plaintiffs, herein against the Honorable J. Griffith Boardman, Secretary of Revenue of the Commonwealth of Pennsylvania; Admiral P. W. Foote, Commissioner of the Pennsylvania Motor Police; and the Honorable Charles J. Margiotti, Attorney General of the Commonwealth of Pennsylvania, and complaining saith:

1. The plaintiffs are members of a partnership trading as Maurer & Myers Auto Convoy, which name is registered under the provisions of the Fictitious Names Act of Pennsylvania, and their principal office is located in the town of Bloomsburg, Columbia County, Pennsylvania.

2. The defendant J. Griffith Boardman is the Secretary of Revenue of the Commonwealth of Pennsylvania, and as such is the head of the Department of Revenue of the said Commonwealth and is in charge of the administration of said department.

3. The defendant Admiral P. W. Foote is the Commissioner of the Pennsylvania Motor Police.

4. The defendant Charles J. Margiotti is the Attorney General of the Commonwealth of Pennsylvania and is the head of the Department of Justice and the chief enforcement officer of the said Commonwealth.

5. The plaintiffs have been operating motor vehicles in the transportation of automobiles as a common carrier continuously since April, 1930.

6. In conducting said operations, the plaintiffs own twelve (12) vehicles and lease twenty-eight (28). Of those owned by the plaintiffs ten (10) are specially designed to transport four (4) automobiles each, a portion of one (1) of which rests over the cab of the transporting vehicle. Of those leased by the plaintiffs twenty-one (21) are specially designed to transport four (4) automobiles each, a portion of one (1) of which rests over the cab of the transporting vehicle. All but one of said vehicles are registered in Pennsylvania. The plaintiffs or their lessors paid to the Department of Revenue the registration fees required for the year 1937.

7. The replacement value of the said ten (10) specially designed vehicles owned by the plaintiffs is thirty thousand four hundred dollars ($30,400). The replacement value of the said twenty-one (21) specially designed vehicles leased by the plaintiffs is seventy-five thousand nine hundred dollars ($75,900).

8. That the plaintiffs have lawfully developed an extensive business, the market value of which is now in excess of seventy-five thousand dollars ($75,000), the net book value thereof being in excess of fifty thousand dollars ($50,000), and the gross receipts for 1936 being approximately two hundred

thousand dollars ($200,000). In the operation of said business, the plaintiffs employ seventy-eight (78) persons to whom they paid as wages and salaries for 1936 the sum of approximately fifty-three thousand dollars ($53,000).

9. The plaintiffs, in the operation of said business, serve some seventy-five (75) distributors and dealers in automobiles, including fifteen (15) of which are residents of Pennsylvania. Said distributors and dealers rely upon this transportation service in order to conduct their business.

10. The plaintiffs operate their vehicles solely in interstate commerce and perform no intrastate transportation between points in Pennsylvania. They have applied for a certificate of public convenience and necessity from the Interstate Commerce Commission under the "Grandfather" Clause (Section 206a) of the Motor Carrier Act, 1935. Under the provisions of said act, they have authority to continue to render interstate service.

11. Under said Motor Carrier Act, 1935, the Interstate Commerce Commission is given full and plenary powers to make safety provisions relating to operations of interstate motor carriers. Such powers have been exercised by the said Interstate Commerce Commission in various orders and regulations which have been promulgated and adopted by it.

12. On or about May 27, 1937 the General Assembly of the Commonwealth of Pennsylvania enacted a statute (Act of June 29, 1937—Act No. 447) amending, in a number of particulars, the provisions of the Vehicle Code of May 1, 1929, P. L. 905. Said statute was approved by the Governor

of the Commonwealth of Pennsylvania on June 29, 1937. Section 1033 (c) of said amendatory act, which section became effective immediately upon approval of the Governor on June 29, 1937, reads as follows:

> "No person shall operate a vehicle on the highways of this Commonwealth carrying any other vehicle any part of which is above the cab of the carrier or over the head of the operator of such carrier vehicle."

13. The defendants have threatened to enforce the provisions of said Section 1033 (c) and have instituted prosecutions under said section in a number of cases throughout the Commonwealth of Pennsylvania including one against the plaintiffs. If said section is enforced, the plaintiffs will be deprived of the reasonable enjoyment of their property, will be required to curtail and possibly discontinue the operation of their vehicles, and will be required to discharge a large number of their employes and they may be forced to discontinue the business entirely. Plaintiffs therefore aver that they, their employes, shippers, consignees and patrons will suffer immediate and irreparable damage unless the relief herein sought is granted.

14. When the plaintiffs purchased and leased their vehicles and licensed them in Pennsylvania, the use of said vehicles in the manner operated by the plaintiffs was legal and valid in the said Commonwealth. The licenses for the operation of said vehicles, the fees for which have been paid in advance by the plaintiffs, do not expire until December 31, 1937.

15. There are no Federal laws or regulations or

orders of the Interstate Commerce Commission, or any other Federal body, board, or commission, which prohibit the operation of the plaintiffs' vehicles in the manner presently operated in interstate commerce.

16. The operations of the plaintiffs' vehicles involving the carriage of a portion of an automobile over the cab of the transporting vehicle are not unsafe, nor do they constitute a hazard either to the operators of the vehicles or to other lawful users of the public highways. On the contrary, such equipment and transportation are conducive to safety.

17. The administration of the said Vehicle Code, including Section 1033 (c) thereof, is under the Department of Revenue of which the defendant, J. Griffith Boardman, is the Secretary and the head. The enforcement of said section is fixed in the Pennsylvania Motor Police, of which the defendant, Admiral P. W. Foote, is the Commissioner, and in the Department of Justice, of which the defendant, Charles J. Margiotti, is the Attorney General and head.

18. The plaintiffs are advised, believe, and therefore aver, that said Section 1033 (c) of the amendatory Act of June 29, 1937—Act No. 447, is unconstitutional, illegal, and void because

(a) The enforcement thereof will deprive the plaintiffs of their property and the use and enjoyment thereof without due process of law and without just compensation therefor, in violation of the provisions of the Constitutions of the United States of America and of the Commonwealth of Pennsylvania.

(b) The enactment of said section is not a proper exercise of the police power, for the reason that the provisions of said section are not reasonably related to the results sought to be attained and for other reasons.

(c) The subject matter of said Section 1033 (c) is not clearly expressed in the title to the act as required by the provisions of Article III, Section 3 of the Constitution of the Commonwealth of Pennsylvania.

(d) The General Assembly of the Commonwealth of Pennsylvania had no right, authority, or jurisdiction to legislate on this subject insofar as interstate commerce is concerned.

(e) The said provision constitutes an unreasonable and invalid burden on interstate commerce.

(f) The said provision, which deprives the plaintiff of the use of said vehicles during the period for which said vehicles were registered and licensed, impairs the obligation of the contract between the Commonwealth of Pennsylvania and the plaintiffs.

(g) The said Section 1033 (c) is unconstitutional, illegal, and void for divers other reasons.

19. The plaintiffs have no adequate remedy at law.

Wherefore, the plaintiffs respectfully pray:

1. That Section 1033 (c) of the act amending the Act of May 1, 1939, P. L. 905, be declared unconstitutional, illegal and void.

2. That the defendants, and their successors in office, their agents, employes, and servants, be en-

joined preliminarily until hearing, and perpetually thereafter, from enforcing the provisions of said section.

3. That your Honorable Court decree such other and further relief as may seem meet and proper.

And your plaintiffs will ever pray, etc.

McNees, Hollinger & Nurick
Sterling G. McNees
Attorneys for Plaintiffs

Commonwealth of Pennsylvania,
County of Dauphin, ss:

Alfred A. Maurer, being duly sworn according to law, deposes and says that he is a partner in the firm of Maurer & Myers Auto Convoy, plaintiffs above named; that he has authority to make this affidavit on behalf of said plaintiffs; and that the facts set forth in the foregoing bill of complaint are true and correct to the best of his knowledge, information, and belief, and he expects to be able to prove the same at the trial of this case.

Alfred A. Maurer

Sworn and subscribed before me this 3rd day of August, 1937.

Anna B. Leader,
Notary Public.

My commission expires: March 9, 1939.
(Seal)

DECREE AWARDING PRELIMINARY INJUNCTION

And now, to wit, this 3 day of August, 1937, upon the filing of the bill and injunction affidavits, and

after due notice has been given to the defendants, and upon motion of Sterling G. McNees, Esq., attorney for the plaintiffs, it is ordered, adjudged, and decreed that a preliminary injunction issue upon security being entered in the sum of One thousand (1000) Dollars, enjoining the defendants, their successors in office, and agents, servants, and employes from enforcing the provisions of Section 1033 (c) of the Act of June 29, 1937—Act No. 447—against the plaintiffs.

This injunction and decree shall continue in effect until further order of the Court.

By the Court,
FRANK B. WICKERSHAM,
A. L. J.

---

(2) ANSWER

And now, this 17th day of August, 1937, come the defendants in the above-entitled case, by Charles J. Margiotti, Attorney General, their attorney, and makes answer to the plaintiffs' bill in equity heretofore filed, as follows:

1. The averments contained in paragraph 1 of plaintiffs' bill are admitted.

2. The averments contained in paragraph 2 of plaintiffs' bill are admitted.

3. The averments contained in paragraph 3 of plaintiffs' bill are admitted.

4. The averments contained in paragraph 4 of plaintiffs' bill are admitted.

5. Defendants have no knowledge of the aver-

ments contained in paragraph 5 of plaintiffs' bill, and, therefore, neither affirm nor deny such averments; if material, defendants call upon the plaintiffs for proof.

6. Defendants are willing to admit, for purposes of this case, that the plaintiffs or their lessors have paid to the Department of Revenue the registration fees required for the year 1937, but the defendants further aver that any privileges conferred by such registration are subject to the legitimate exercise of the police power of the Commonwealth; the remaining averments contained in paragraph 6 of plaintiffs' bill are within the exclusive knowledge of the plaintiffs, so that the defendants neither affirm nor deny such averments; if material, defendants call upon the plaintiffs for proof.

7. The averments contained in paragraph 7 of plaintiffs' bill are within the exclusive knowledge of the plaintiffs, so that the defendants neither affirm nor deny such averments; if material, defendants call upon the plaintiffs for proof.

8. The averments contained in paragraph 8 of plaintiffs' bill are within the exclusive knowledge of the plaintiffs, so that the defendants neither affirm nor deny such averments; if material, defendants call upon the plaintiffs for proof.

9. The averments contained in paragraph 9 of plaintiffs' bill are within the exclusive knowledge of the plaintiffs, so that the defendants neither affirm nor deny such averments; if material, defendants call upon the plaintiffs for proof.

10. Defendants have no knowledge of the averments contained in paragraph 10 of plaintiffs' bill

with reference to the operation of their vehicles solely in interstate commerce and their application for a certificate of public conveyance and necessity from the Interstate Commerce Commission, and, therefore, neither affirm nor deny such averments; if material, defendants call upon the plaintiffs for proof. Defendants deny that under the provisions of the Motor Carrier Act of 1935 the plaintiffs have the authority to continue to render interstate service without being subject to the statutes of the Commonwealth of Pennsylvania, particularly Section 1033 (c) as added to The Vehicle Code by Act No. 447, approved June 29, 1937.

11. Defendants deny that the Interstate Commerce Commission is given full and plenary powers, under the Motor Carrier Act of 1935, to make safety provisions relating to the operations of interstate motor carriers to the exclusion of regulations by the several states. Defendants further deny that any such powers have been exercised by the said Interstate Commerce Commission, in the various orders and regulations which have been promulgated and adopted by it, affecting the operation of vehicles carrying any other vehicle, any part of which is above the cab of the carrier or over the head of the operator of such carrier vehicle. On the contrary, defendants aver that the failure of the Interstate Commerce Commission or any other agency of the United States government to regulate such carrier vehicles cannot be construed to give such carrier vehicles the right to carry other vehicles, any part of which is over the cab of the carrier or over the head of the operator thereof, which failure leaves the field of regulation of such carrier vehicles within the sole jurisdiction of the various states, and

that for this reason the provisions of Section 1033 (c), as added to The Vehicle Code by Act No. 447, approved June 29, 1937, constitute a valid exercise of the police power of this Commonwealth and are in full force and effect as to all such carrier vehicles operated within Pennsylvania.

12. The averments contained in paragraph 12 of plaintiffs' bill are admitted.

13. Defendants admit that prior to the granting of the preliminary injunction in the above entitled case, general steps had been taken to enforce the provision of Section 1033 (c) as added to The Vehicle Code by Act No. 447, approved June 29, 1937. Defendants deny that, if the said section is enforced, the plaintiffs will be deprived of a reasonable enjoyment of their property, will be required to discontinue the operation of their vehicles, and will be required to discharge a large number of their employes, and may be forced to discontinue the business entirely. Defendants also deny that plaintiffs, their employes, shippers, consignees, and patrons will suffer immediate and irreparable damage unless the prayer of the plaintiffs' bill is granted. On the contrary, defendants are informed and therefore aver that carrier vehicles designed to transport other vehicles may be so altered as to conform with the provisions of the said Section 1033 (c) of The Vehicle Code without the necessity of prohibitory, excessive or unconstitutional expenditures, and that except for such altorations, the business of the plaintiffs will not be interfered with.

14. Defendants have no knowledge of whether the plaintiffs operated their vehicles in accordance with law within this Commonwealth, and, if material, de-

mand proof of the averments contained in paragraph 14, except that it is admitted that there was nothing in the statutes of the Commonwealth of Pennsylvania prohibiting the operation of a vehicle on the highways of this Commonwealth for the sole reason that it carried any other vehicle, any part of which was above the cab of the carrier or over the head of the operator of such carrier, and it is denied that when the plaintiffs purchased and leased their vehicles, or at any time subsequent thereto, that it was unlawful to operate any vehicle unsafe or unfit for operation, or one not equipped in accordance with the requirements of The Vehicle Code. Defendants admit that the registration fees for plaintiffs' vehicles have been paid for the calendar year 1937, but the defendants further aver that such registration privileges are subject to the legitimate exercise of the police power by the Commonwealth.

15. It is admitted that there are no Federal laws or regulations or orders of the Interstate Commerce Commission or any other Federal body which prohibit the operation of the plaintiffs' vehicles solely for the reason that they carry any other vehicle, any part of which is above the cab of the carrier or over the head of the operator of such carrier vehicle, and the defendants further aver that there are no such Federal laws or regulations or orders which expressly permit the operation of plaintiffs' vehicles in this manner. Defendants have no knowledge of whether the manner in which the plaintiffs operated their vehicles was in conformance with any other Federal rules, regulations or orders, and, if material to the present case, demands proof thereof.

16. The averments contained in paragraph 16 of plaintiffs' bill are denied. On the contrary, it is averred that vehicles designed to carry a portion of an automobile over the cab are unsafe, and do constitute a hazard to the operators of the vehicles and to the traveling public generally.

17. The averments contained in paragraph 17 of plaintiffs' bill are admitted.

18. Defendants deny that Section 1033 (c) of Act No. 447, approved June 29, 1937, is unconstitutional, illegal and void for any of the reasons specified in paragraph 18 of plaintiffs' bill; that; on the contrary, the said Section 1033 (c) is a valid exercise of the police power by the legislative branch of the Commonwealth, and, as a matter of law, does not conflict with any of the provisions of the Constitution of Pennsylvania or of the United States.

19. Defendants deny that the plaintiffs have no adequate remedy at law but, on the contrary, aver that defendants may properly raise for judicial determination, the question of the constitutionality of Section 1033 (c) in the type of summary proceeding for violation thereof constituted by the defendants prior to the granting of the preliminary injunction in the above entitled case; for this reason the defendants are advised and therefore aver that plaintiffs are not entitled to equitable relief.

Wherefore, the defendants respectfully pray that the plaintiffs' bill be dismissed and that the preliminary injunction heretofore granted be dissolved at the cost of the plaintiffs.

CHARLES J. MARGIOTTI,
Attorney General.

AFFIDAVIT

Commonwealth of Pennsylvania,
County of Dauphin, ss:

George W. Keitel, being duly sworn according to law, deposes and says that he is Assistant Deputy Attorney General of the Commonwealth of Pennsylvania and as such, is authorized to make this affidavit on behalf of Charles J. Margiotti, Attorney General of the Commonwealth of Pennsylvania, one of the above named defendants; that the averments of fact contained in the foregoing are true and correct to the best of his knowledge, information and belief.

GEORGE W. KEITEL

Sworn to and subscribed before me this 13th day of August, 1937.

Miss Lucille A. Stroup,
Notary Public.

My commission expires March 5, 1939.
(Seal)

III.

THE EVIDENCE

Before

Hon. Frank B. Wickersham, A. L. J., in Courtroom No. 2, Harrisburg, Pa., Monday, November 8, 1937, Beginning at 11:25 A. M.

Appearances

McNees, Hollinger & Nurick, Esqs., for the plaintiffs.

Hon. Charles J. Margiotti, Attorney General, Hon. George W. Keitel, Assistant Deputy Attorney General, for the Commonwealth; Lawrence Casey, Esq., counsel for the Department of Revenue; James D. McHugh, Esq., assistant counsel for the Department of Revenue; Michael Donohue, Esq., counsel for the Bureau of Motor Vehicles.

Harrisburg, Pa., Monday, November 8, 1937.

The suits of Alfred A. Maurer and Marcus W. Myers, trading as Maurer & Myers Auto Convoy, plaintiffs, v. J. Griffith Boardman, Secretary of Revenue of the Commonwealth of Pennsylvania; P. W. Foote, Commissioner of the Pennsylvania Motor Police; and Charles J. Margiotti, Attorney General of the Commonwealth of Pennsylvania, defendants, in the court of common pleas of Dauphin county, sitting in equity, No. 1308 Equity Docket, No. 284, Commonwealth Docket, 1937; M. G. Convoy,

Inc., a corporation, plaintiff, v. J. Griffith Boardman, Secretary of Revenue of the Commonwealth of Pennsylvania; P. W. Foote, Commissioner of the Pennsylvania Motor Police; and Charles J. Margiotti, Attorney General of the Commonwealth of Pennsylvania, defendants, in the court of common pleas of Dauphin county, sitting in equity, No. 1309 Equity Docket, No. 282 Commonwealth Docket, 1937; and John G. Reeser, plaintiff, v. J. Griffith Boardman, Secretary of Revenue of the Commonwealth of Pennsylvania; P. W. Foote, Commissioner of the Pennsylvania Motor Police; and Charles J. Margiotti, Attorney General of the Commonwealth of Pennsylvania, defendants, in the court of common pleas of Dauphin county, sitting in equity, No. 1318 Equity Docket, No. 291 Commonwealth Docket, 1937, were called for trial before Hon. Frank B. Wickersham, A. L. J., in courtroom No. 2, Harrisburg, Pa., on Monday, November 8, 1937, at 11:25 a. m.

The following proceedings were had:

MR. KEITEL: I would like to present to assist me Lawrence Casey, Esq., of the Lackawanna bar, counsel for the Department of Revenue; James D. McHugh, Esq., of the Philadelphia bar, assistant counsel for the Department of Revenue; and Michael Donohue, Esq., counsel for the Bureau of Motor Vehicles.

THE COURT: They may be admitted for the purposes of this case.

MR. XURICK: We have a stipulation that the three cases may be tried together. If the court please, there are three cases to be tried together, and they involve the same questions, and in order

to conserve the time of the court and of all the parties concerned counsel have agreed that they should be consolidated for the purpose of hearing.

MR. KEITEL: That is agreeable.

THE COURT: Tell me what it is all about.

MR. NURICK: I will, your Honor.

The legislature at the last session amended the vehicle code in a number of particulars, and the provisions which are applicable here, the provisions of section 1033, attempt to prescribe certain regulations with regard to vehicles which carry automobiles contrary—

THE COURT: On top of the car?

MR. NURICK: That is one subsection of that section that provides that particular point. But there are three other provisions of this section which do not become effective until January first, 1940.

THE COURT: Nineteen forty?

MR. NURICK: Yes, January first, 1940.

The particular section involved is 1033 (c), which became effective immediately upon the passage of the statute, which was June 29, 1937. It is very short, and I shall read it. It provides that (reading):

> No person shall operate a vehicle on the highways of this commonwealth carrying any other vehicle any part of which is above the cab of the carrier or over the head of the operator of such carrier vehicle.

After this section became effective, and that was immediately upon its enactment, three bills in equity

were filed by various plaintiffs who are parties to this record praying for a preliminary injunction against the enforcement of that particular section, 1033 (c). Preliminary injunctions were requested and your Honor granted them on affidavits, and subsequently upon hearing those injunctions have been continued. Since that time there have been petitions to intervene which have been approved, since the commonwealth agreed to the intervention, agreeing it would be subject to all defects available against the bills and subject to any imperfections in the bills and orders of injunction after they have brought the petitions in.

THE COURT: Why can't the testimony taken at the other hearing be used in this hearing?

MR. NURICK: It wasn't quite as full by either party as is necessary to determine the questions.

THE COURT: I remember distinctly the defendant took the witness stand and stated he owned all these trucks, and said he couldn't operate them unless it had the extraordinary weight over the cab.

MR. NURICK: It was the plaintiff.

MR. KEITEL: It was the plaintiff.

THE COURT: I remember they couldn't get around and didn't have enough traction unless there was an automobile on top.

MR. NURICK: I think there will be more time lost than time saving by incorporating that particular record.

THE COURT: I am not telling you how to try your case.

MR. NURICK: In order to indicate the princi-

pal questions involved here, the first contention by these plaintiffs is that the enactment of the federal motor carrier act which gave the duty and power to the interstate commerce commission to prescribe safety regulations for interstate motor carriers superseded any jurisdiction which the state otherwise might have had with regard to purely interstate operators, and all the plaintiffs and intervenors appear in that category. In addition it is alleged in the bills that the interstate commerce commission in pursuance of its power has adopted certain safety regulations which pertain to all carriers.

Another question which is involved is whether even in the absence of such statutory supersedure these particular provisions would not be unreasonable and an undue burden on interstate commerce.

Another question is whether this particular statute is a proper exercise of the police power, it being the contention of the plaintiffs that it is not a safety measure, and unless it can be sustained as a safety measure we think it would follow that under the police power it is not a proper exercise of power. We contend it would deprive the plaintiffs of their property and the use thereof without due process of law.

We also raise the contention that since it applies only to units which transport automobiles and does not apply to units which transport other types of freight and merchandise it denies to the plaintiffs the equal protection of the laws.

Of course the commonwealth will be in best position to state its own position, but briefly I think it is they contend that the motor carrier act supersedes such rights unless the interstate commerce

commission takes specific steps wth regard to this particular point, and they also assert it is a proper safety measure and a proper exercise of the police power, and being so it does not result in the taking of property without due process of law.

THE COURT: Maybe Mr. Keitel would like to make a statement.

MR. KEITEL: I believe, your honor, that is a fair statement with the possible exception that there are minor matters that haven't been submitted. We do not think the case as it now stands raises this question of discrimination to which Mr. Nurick referred.

MR. NURICK: You mean equal protection?

MR. KEITEL: I mean equal protection.

MR. NURICK: In opening the case we would like to refer the stenographer to parts of the bills and answers, and he can copy them into the record. In regard to the M. & G. Convoy case, paragraphs 1, 2, 3, 4, 12 and 17 have been wholly admitted, and paragraph 13 has been partially admitted. We would like that the averments of the bill and answer with regard to these particular paragraphs be placed into this record.

In regard to the Maurer and Myers bill, paragraphs 1, 2, 3, 4, 12 and 17 have been wholly admitted, and paragraph 6 has been partially admitted.

With regard to the Reeser proceeding, paragraphs 1, 2, 3, 4, 12 and 17 have been wholly admitted, and paragraphs 6 and 13 have been partially admitted.

We would ask that the stenographer be directed to place into the record the averments of those para-

graphs and the answers admitted in whole or in part and omit reading them and save the time of the court.

THE COURT: Do you have any objection?

MR. KEITEL: No objection.

THE COURT: It is so ordered.

The paragraphs of the bills and answers are as follows:

M. & G. Convoy case—

Bill.

1. The plaintiff is a corporation incorporated under the laws of the state of New York, and having its principal place of business at 1055 E. Delavan avenue, Buffalo, New York.

Answer:

1. The averments contained in paragraph 1 of plaintiff's bill are admitted.

Bill.

2. The defendant J. Griffith Boardman is the secretary of revenue of the commonwealth of Pennsylvania, and as such is the head of the department of revenue of the said commonwealth and is in charge of the administration of said department.

Answer.

2. The averments contained in paragraph 2 of plaintiff's bill are admitted.

Bill.

3. The defendant Admiral P. W. Foote is the commissioner of the Pennsylvania motor police.

Answer.

3. The averments contained in paragraph 3 of plaintiff's bill are admitted.

Bill.

4. The defendant Charles J. Margiotti is the attorney general of the commonwealth of Pennsylvania and is the head of the department of justice and the chief enforcement officer of the said commonwealth.

Answer.

4. The averments contained in paragraph 4 of plaintiff's bill are admitted.

Bill.

12. On or about May 27, 1937, the general assembly of the commonwealth of Pennsylvania enacted a statute (act of June 29, 1937, act No. 447) amending in a number of particulars the provisions of the vehicle code of May 1, 1929, P. L. 905. Said statute was approved by the governor of the commonwealth of Pennsylvania on June 29, 1937. Section 1033 (c) of said amendatory act, which section became effective immediately upon the approval of the governor on June 29, 1937, reads as follows:

"No person shall operate a vehicle on the highways of this commonwealth carrying, any other vehicle any part of which is above the cab of the carrier or over the head of the operator of such carrier vehicle."

Answer.

12. The averments contained in paragraph 12 of plaintiff's bill are admitted.

Bill.

13. The defendants have threatened to enforce against the plaintiff the provisions of said section 1033 (c) and have instituted prosecutions under said section in a number of cases throughout the Commonwealth of Pennsylvania. If said section is enforced, the plaintiff will be deprived of the reasonable enjoyment of its property, will be required to discontinue the operation of its vehicles, and will be required to discharge a large number of its employes, and may be forced to discontinue the business entirely. Plaintiff therefore avers that it, its employes, shippers, consignees and patrons will suffer immediate and irreparable damage unless the relief herein sought is granted.

Answer.

13. Defendants admit that prior to the granting of the preliminary injunction in the above-entitled case, general steps had been taken to enforce the provisions of section 1033 (c) as added to the vehicle code by act No. 447 approved June 29, 1937. Defendants deny that, if the said section is enforced, the plaintiff will be deprived of a reasonable enjoyment of its property, will be required to discontinue the operation of its vehicles, and will be required to discharge a large number of its employees, and may be forced to discontinue the business entirely. Defendants also deny that plaintiff, its employes, shippers, consignees and patrons will suffer immediate and irreparable damage unless the prayer of the plaintiff's bill is granted. On the contrary, defendants are informed and therefore aver that carrier vehicles designed to

transport other vehicles may be so altered as to conform with the provisions of the said section 1033 (c) of the vehicle code without the necessity of prohibitory, excessive or unconstitutional expenditures, and that except for such alterations the business of the plaintiff will not be interfered with.

Bill.

17. The administration of the said vehicle code, including section 1033 (c) thereof, is under the department of revenue, of which the defendant J. Griffith Boardman is the secretary and the head. The enforcement of said section is fixed in the Pennsylvania motor police, of which the defendant Admiral P. W. Foote is the commissioner, and in the department of justice, of which the defendant Charles J. Margiotti is the attorney general and head.

Answer.

17. The averments contained in Paragraph 17 of plaintiff's bill are admitted.

Maurer and Myers case—

Bill.

1. The plaintiffs are members of a partnership trading as Maurer & Myers Auto Convoy, which name is registered under the provisions of the fictitious names act of Pennsylvania, and their principal office is located in the town of Bloomsburg, Columbia county, Pennsylvania.

Answer.

1. The averments contained in paragraph 1 of plaintiffs' bill are admitted.

Bill.

2. The defendant J. Griffith Boardman is the secretary of revenue of the Commonwealth of Pennsylvania, and as such is the head of the department of revenue of the said commonwealth and is in charge of the administration of said department.

Answer.

2. The averments contained in paragraph 2 of plaintiffs' bill are admitted.

Bill.

3. The defendant Admiral P. W. Foote is the commissioner of the Pennsylvania motor police.

Answer.

3. The averments contained in paragraph 3 of plaintiffs' bill are admitted.

Bill.

4. The defendant Charles J. Margiotti is the attorney general of the commonwealth of Pennsylvania and is the head of the department of justice and the chief enforcement officer of the said commonwealth.

Answer.

4. The averments contained in paragraph 4 of plaintiffs' bill are admitted.

Bill.

6. In conducting said operations the plaintiffs own twelve (12) vehicles and lease twenty-eight (28). Of those owned by the plaintiffs ten (10) are specially designed to transport four (4) automobiles each, a portion of one (1) of which rests over the cab of the transporting

vehicle. Of those leased by the plaintiffs twenty-one (21) are specially designed to transport four (4) automobiles each, a portion of one (1) of which rests over the cab of the transporting vehicle. All but one of said vehicles are registered in Pennsylvania. The plaintiffs or their lessors paid to the department of revenue the registration fees required for the year 1937.

Answer.

6. Defendants are willing to admit for the purposes of this case that the plaintiffs or their lessors have paid to the department of revenue the registration fees required for the year 1937, but the defendants further aver that any privileges conferred by such registration are subject to the legitimate exercise of the police power of the commonwealth; the remaining averments contained in paragraph 6 of plaintiffs' bill are within the exclusive knowledge of the plaintiffs, so that the defendants neither affirm nor deny such averments; if material, defendants call upon the plaintiffs for proof.

Bill.

12. On or about May 27, 1937, the general assembly of the commonwealth of Pennsylvania enacted a statute (act of June 29, 1937, act No. 447) amending in a number of particulars the provisions of the vehicle code of May 1, 1929, P. L. 905. Said statute was approved by the governor of the commonwealth of Pennsylvania on June 29, 1937. Section 1033 (c) of said amendatory act, which section became effective immediately upon approval of the governor on June 29, 1937, reads as follows:

"No person shall operate a vehicle on the highways of this commonwealth carrying any other vehicle any part of which is above the cab of the carrier or over the head of the operator of such carrier vehicle.".

Answer.

12. The averments contained in paragraph 12 of plaintiffs' bill are admitted.

Bill.

17. The administration of the said vehicle code, including section 1033 (c) thereof, is under the department of revenue, of which the defendant J. Griffith Boardman is the secretary and the head. The enforcement of said section is fixed in the Pennsylvania motor police, of which the defendant Admiral P. W. Foote is the commissioner, and in the department of justice, of which the defendant Charles J. Margiotti is the attorney general and head.

Answer.

17. The averments contained in paragraph 17 of plaintiffs' bill are admitted.

Reeser case—

Bill.

1. The plaintiff, John G. Reeser, operates as an individual, with his address at Duncannon, Perry county, Pennsylvania, R. D. 2, and his actual residence in Dauphin county at the end of the Clarks Ferry bridge.

Answer.

1. The averments contained in paragraph 1 of plaintiff's bill are admitted.

Bill.

2. The defendant J. Griffith Boardman is the secretary of revenue of the commonwealth of Pennsylvania, and as such is the head of the department of revenue of the said commonwealth and is in charge of the administration of said department.

Answer.

2. The averments contained in paragraph 2 of plaintiffs' bill are admitted.

Bill.

3. The defendant Admiral P. W. Foote is the commissioner of the Pennsylvania motor police.

Answer.

3. The averments contained in paragraph 3 of plaintiff's bill are admitted.

Bill.

4. The defendant Charles J. Margiotti is the attorney general of the commonwealth of Pennsylvania and is the head of the department of justice and the chief enforcement officer of the said commonwealth.

Answer.

4. The averments contained in paragraph 4 of plaintiff's bill are admitted.

Bill.

6. In conducting said operations the plaintiff owns twelve (12) motor tractors and twelve (12) semitrailers and leases one (1) motor tractor and one (1) motor trailer. Of those owned by the plaintiff eleven (11) carrier vehicles are specially designed to transport four

(4) automobiles each, in all of which a part of one (1) automobile is carried over the cab. The other carrier vehicle owned is specially designed to transport three (3) automobiles and a part of one of them is carried over the cab. The one (1) carrier vehicle leased is designed specially to carry four (4) automobiles, a part of one (1) of which is carried over the cab. All of said vehicles both owned and leased are registered in Pennsylvania. The plaintiff or the lessor in each case has paid to the department of revenue the registration fees required for the year 1937.

Answer.

6. Defendants are willing to admit for purposes of this case that the plaintiff or his lessors have paid to the department of revenue the registration fees required for the year 1937, but the defendants further aver that any privileges conferred by such registration are subject to the legitimate exercise of the police power of the commonwealth; the remaining averments contained in paragraph 6 of the plaintiff's bill are within the exclusive knowledge of the plaintiff, so that the defendants neither affirm nor deny such averments; if material, defendants call upon the plaintiff for proof.

Bill.

12. On or about May 27, 1937, the general assembly of the commonwealth of Pennsylvania enacted a statute (act of June 29, 1937, act No. 447) amending in a number of particulars the provisions of the vehicle code of May 1, 1929, P. L. 905. Said statute was approved by the

governor of the commonwealth of Pennsylvania on June 29, 1937. Section 1033 (c) of said amendatory act, which section became effective immediately upon approval of the governor on June 29, 1937, reads as follows:

"No person shall operate a vehicle on the highways of this commonwealth carrying any other vehicle any part of which is above the cab of the carrier or over the head of the operator of such carrier vehicle."

Answer.

12. The averments contained in paragraph 12 of plaintiff's bill are admitted.

Bill.

13. The defendants have threatened to enforce the provisions of said section 1033 (c) and have instituted prosecutions under said section in a number of cases throughout the commonwealth of Pennsylvania. If said section is enforced, the plaintiff will be deprived of the reasonable enjoyment of his property, will be required to curtail and possibly discontinue the operation of his vehicles, and will be required to discharge a large number of his employes, and he may be forced to discontinue the business entirely. Plaintiff therefore avers that he, his employes, shippers, consignees and patrons will suffer immediate and irreparable damage unless the relief herein sought is granted.

Answer.

13. Defendants admit that prior to the granting of the preliminary injunction in the above-entitled case, general steps had been taken to enforce the provisions of section 1033

(c) as added to the vehicle code by act No. 447 approved June 29, 1937. Defendants deny that, if the said section is enforced, the plaintiff will be deprived of a reasonable enjoyment of his property, will be required to discontinue the operation of his vehicles, and will be required to discharge a large number of his employes, and may be forced to discontinue the business entirely. Defendants also deny that plaintiff, his employes, shippers, consigness and patrons will suffer immediate and irreparable damage unless the prayer of the plaintiff's bill is granted. On the contrary, defendants are informed and therefore aver that carrier vehicles designed to transport other vehicles may be so altered as to conform with the provisions of the said section 1033 (c) of the vehicle code without the necessity of prohibitory, excessive or unconstitutional expenditures, and that except for such alterations the business of the plaintiff will not be interfered with.

Bill.

17. The administration of the said vehicle code, including section 1033 (c) thereof, is under the department of revenue, of which the defendant J. Griffith Boardman is the secretary and the head. The enforcement of said section is fixed in the Pennsylvania motor police, of which the defendant Admiral P. W. Foote is the commissioner, and in the department of justice, of which the defendant Charles J. Margiotti is the attorney general and head.

Answer.

17. The averments contained in paragraph 17 of plaintiff's bill are admitted.

Plaintiffs' Exhibit No. 1 identified.
Plaintiffs' Exhibit No. 2 identified.

MR. NURICK: May it please your honor, I desire to offer in evidence at this time Plaintiffs' Exhibit No. 1, which is a certified copy of the federal motor carrier act of 1935.

MR. KEITEL: No objection.

THE COURT: Admitted.

MR. NURICK: We desire to offer in evidence Plaintiffs' Exhibit No. 2, a certified copy of all safety regulations adopted to June 15, 1937, by the interstate commerce commission under the powers conferred in the motor carrier act.

MR. KEITEL: We have no objection to that, your honor, except we might indicate there is some question as to the relevancy of this.

THE COURT: With that statement it is admitted.

Plaintiffs' Exhibit No. 3-A identified.
Plaintiffs' Exhibit No. 3-B identified.
Plaintiffs' Exhibit No. 3-C identified.
Plaintiffs' Exhibit No. 3-D identified.
Plaintiffs' Exhibit No. 3-E identified.
Plaintiffs' Exhibit No. 3-F identified.
Plaintiffs' Exhibit No. 3-G identified.

MR. McNEES: If the court please, we have here seven pages on which are printed pictures of a number of types of equipment involved in the case. They have been marked Plaintiffs' Exhibit 3 and each page lettered from A to G, and the pages of the ex-

hibit for G also show specifications, sizes and lengths, which are practically of immaterial interest in the case, but which will help the court to understand the situation. It is agreed we may submit them now.

MR. KEITEL: We do not admit these are all the types, but involve only those exhibits, and we think they should be in.

MR. McNEES: They are not all the types of vehicles. They are typical types of vehicles that will be involved in the testimony.

GUY S. MORDAN, called as a witness on behalf of the plaintiffs, being duly sworn, was examined and testified as follows:

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Mordan?

A. Buffalo, New York.

Q. In what business are you engaged?

A. Transportation of automobiles.

Q. Under what name?

THE COURT: Speak louder.

THE WITNESS: Under the name of M. & G. Convoy, Inc.

BY MR. McNEES:

Q. That is an incorporated company?

A. Yes, sir.

Q. What is your office in the company?

A. President.

Q. Are you a substantial stockholder?

A. I am.

Q. And did you swear to the bill in this case

which you have brought?

A. Yes.

Q. Now, how long have you been engaged in the transportation of automobiles?

A. I have been engaged eight years last September.

Q. Do you have any other business?

A. I do not.

Q. Just what do you do when you say you are carrying automobiles? How do you carry them?

A. We carry them by motor transport.

Q. That is you transport automobiles by carrier, motor carrier?

A. Yes, sir.

Q. Are you engaged in the business of driving new cars on their own power?

A. Yes, sir; in addition.

Q. But it isn't involved in this case?

A. No, it isn't.

Q. Now, what part of your business done in Pennsylvania is interstate? Or may I ask you this? Do you move any automobiles in Pennsylvania that have been moved in from some other state?

A. No, none.

Q. How many trucks do you have?

A. A hundred and twenty-two trucks and a hundred and twenty-two trailers.

Q. Now, may all of those at times be used in Pennsylvania?

A. They are all used in Pennsylvania, yes, sir, at some time or other. They may not all be in one day, but they do all come into Pennsylvania.

Q. Where do you get the cars? Where do you pick them up?

A. The cars are built in Detroit. During the open season we have been loading them in Buffalo,

during the closed season in Detroit, sometimes Cleveland. Sometimes I load cars for our manufacturer there.

Q. Will you give us some of the points in Pennsylvania where you deliver those cars?

A. We deliver through the whole season to Lancaster, Scranton, Williamsport, Wilkes-Barre and Philadelphia.

THE COURT: Is it necessary that you drive up and down Front street with those cars between eleven o'clock at night and six o'clock in the morning? Could you go around by Cameron street?

THE WITNESS: We have diverted all our eastern hauls around Cameron street. We have endeavored to divert the western, but some of the cops asked us not to go through traffic.

THE COURT: As soon as the new road is finished, you would keep out of Harrisburg?

THE WITNESS: Yes, sir.

THE COURT: Thank you.

BY MR. McNEES:

Q. Mr. Mordan, do you transport any cars through Pennsylvania to any other states?

A. Yes, sir.

Q. Where do they go?

A. To Maryland, New York, New Jersey, District of Columbia and Delaware.

Q. Do you transport to all those states?

A. Yes, sir.

Q. Have you applied to the interstate commerce commission for authority to render that service?

A. I have.

Q. Has the certificate been issued yet or is it pending?

A. I have had a hearing, but I haven't got my certificates or my I. C. C. plates.

Q. Under the Grandfather clause?

A. Yes, sir.

THE COURT: I thought this clause was only applicable to the southern states.

MR. McNEES: The Grandfather clause, may it please the court, covers those operators that were in business on January first, 1935, and who filed with the interstate commerce commission applications asking permission to continue that type of business afterward.

THE COURT: Does it only take two years in Pennsylvania to make a grandfather?

MR. McNEES: It takes longer than that in Pennsylvania under the public service commission.

BY MR. McNEES:

Q. Mr. Mordan, I am not sure that we have this question on the record. Do you use the same type of equipment whether delivering to New York, New Jersey or Pennsylvania?

A. We do.

(Plaintiffs' Exhibit No. 3 shown witness.)

BY MR. McNEES:

Q. I show you Exhibit No. 3, being seven different pages marked with letters, and ask you which ones of those you use in your business?

(Witness examines papers.)

(Witness indicates.)

MR. McNEES: May I state the witness indicates he uses equipment of the type shown

on Exhibit 3-D and shown as marked on Exhibit 3-G?

BY MR. McNEES:

Q. Mr. Mordan, do all those trucks—the trucks indicated on Exhibit 3-G are marked thereon as model A and model E?

A. That's right.

Q. Mr. Mordan, do all of the motor carriers you have indicated carry all or part of an automobile over the cab?

A. They do.

Q. Do you have any other type of equipment which you use?

A. I don't have any other type except the three types I showed you.

Q. Do you know the approximate value of the equipment you use in this service?

A. Yes.

Q. Will you tell us that?

A. The value of it is something over four hundred thousand dollars.

Q. Are you speaking of new?

A. Yes.

Q. What would be the present-day value?

A. Of my particular operation would be—

Q. Of your equipment?

A. —about a third less than the book value today.

Q. What is that?

A. About a third less for depreciation.

Q. Just roughly, what is that?

A. I will have to figure.

(Witness makes calculation.)

THE WITNESS: That would be about two hundred and seventy thousand dollars.

BY MR. McNEES:

Q. Now, if the provision prohibiting the transportation of a car over the cab would be enforced, what would be the value of your equipment?

A. Well, mine would be a loss.

Q. You couldn't use any of it as it now is?

A. None.

Q. Is your equipment a large part of the total assets of your company?

A. Yes.

Q. More than half?

A. Yes.

Q. When you bought this equipment, so far as you knew could it be legally operated in all states through which you run?

A. Well—not all—when I bought it, yes.

Q. As it is now, can you still operate this equipment from Buffalo to Cleveland through Pennsylvania?

A. No, there is—I have a few types of those two models that cannot be operated in Ohio, but they can be operated in all the eastern states I run into.

Q. Can you use all of your equipment from Buffalo south?

A. Yes.

Q. Through Pennsylvania?

A. Yes.

Q. In New Jersey?

A. Yes.

Q. In New York?

A. Yes.

Q. In Maryland?

A. Yes.

Q. In Delaware?

A. Yes.

Q. And is that where you want to use it?

A. That is where I want to use it.

Q. Mr. Mordan, do you have any record of your accidents?

A. Yes.

Q. Which you sustain in the handling of this equipment?

THE WITNESS: Pardon me?

BY MR. McNEES:

Q. Do you have any record of the accidents which you sustain in handling all of the equipment you drive?

A. Yes.

Q. Will you tell us whether you have taken from this record, first the number of miles, the number of truck miles which you have operated covering equipment with a car over the cab?

MR. KEITEL: May it please the court, we object to that. We would like to know how these figures were obtained and arrived at.

BY MR. McNEES:

Q. Mr. Mordan, what sort of record do you keep as to truck miles?

A. We keep a record of every truck.

Q. In your office?

A. In our office, the number of accidents and everything.

Q. I am asking you the record per truck miles for carrying trucks with a car over the cab. Where do you get that information?

A. From the number of trips and destination and the mileage that it requires to make that round trip. We have the mileage set up to every point, just how many miles it is. We add this number of

miles up at the end of every month, and we know just how far each truck has run and the cost of operation.

Q. And is it that addition showing the number of miles that you propose to give here in evidence?

A. Yes, sir.

Q. What period of time does it cover?

THE WITNESS: What period does it cover?

MR. McNEES: Yes.

BY MR. McNEES:

Q. What period?

A. From the first of September, 1936, to the thirty-first of August, 1937.

Q. Do you have any figures which you propose to give which are not taken from your office record?

A. No.

Cross Examination

BY MR. KEITEL:

Q. Would you say the accident records constitute the accidents handed in by the drivers?

A. Yes.

Q. How do you know they report every accident?

A. If they don't, we soon find it out.

Q. How?

A. Well, the claimant would soon turn in a bill to the M. & G. Convoy if we had an accident.

Q. Suppose the driver paid it himself?

A. That isn't possible.

Q. Why isn't it?

A. They don't carry that much money, and they don't like to pay out of their pockets, and it is our practice not to allow a driver to pay any claim, no matter how trifling. If we should ever catch a man,

he would be automatically discharged.

Q. If he did that, that wouldn't be in your report, would it?

A. No, it wouldn't.

Q. Do your drivers get any recommendation or any bonus for not having an accident?

A. They do.

MR. KEITEL: May it please the court, we don't believe these records are accurate records of accident statistics because, if a driver gets a bonus and the cost would be less than the bonus, why, he might very naturally pay it out of his own pocket.

THE COURT: Are you asking us to imagine that?

MR. KEITEL: I do on that point, and I think the records testified from are not accurate, and move that they be excluded on that point.

MR. McNEES: They are just the best records we could get. That is the best I could say for them. We can't get a man on every truck to show they don't have accidents. The one report is made to the insurance company and one made to the accident council.

THE COURT: They are admitted subject to your objection.

Redirect Examination

BY MR. McNEES:

Q. Mr. Mordan, will you tell us now the total number of truck miles on these car carriers which carry cars over the cab?

A. Well, this exhibit, model A and model E,

those types last year drove three million three hundred and fifty-one thousand two hundred miles.

Q. That is during the entire twelve months you mentioned?

A. That is during the twelve months.

Q. How many accidents?

A. We had twenty-three accidents.

Q. Did you figure what would be the accident frequency per hundred miles?

A. Yes, point sixty-eight.

Q. Now, do you have the miles of the other types?

A. Yes, I do; one million four hundred and forty-five thousand six hundred miles.

Q. The number of accidents?

A. Twenty accidents.

Q. What frequency does that show?

A. One point thirty-eight per hundred thousand miles.

Q. Did you ever drive any of these vehicles yourself?

A. Yes, sir.

Q. Have you driven all types?

A. I have.

Q. Do you know just how they are loaded and how the cars are fastened, if fastened?

A. Yes, sir; I do.

Q. Explain?

A. They are loaded on their power.

Q. Well, go on and tell us how it is done?

THE WITNESS: Do you mean dropped on the skids?

MR. McNESS: Yes.

THE WITNESS: Each outfit has a pair of skids that drop down and we drive the cars on

on their own power. When we get them in position they are joined with four chains. Each car is chained with four chains, two chains oblong one way and two the other way. They are anchored tight, bolted down with turnbuckles, and the load then really becomes part of the outfit itself.

BY MR. McNEES:

Q. Is there inspection after the load is put on?

A. There is. We inspect every load that goes out. I have one man that does nothing but that. When the driver is through loading he inspects them for tie-downs or any damages that he might have caused or what not during the loading, if any, to see that he has all the bolts, and so forth, tight before he goes.

Q. Over what part of the car does the chain go that fastens them?

A. Over the axles.

Q. There is a chain over each end of each axle?

A. That's right.

Q. To what part of the carrier do you fasten them?

A. We fasten them to the cross members.

Q. What are they?

A. The cross members, to the truck frame.

Q. Are they steel bars?

A. Yes.

Q. Will you tell us whether or not with that equipment you can operate it more safely, that is with a car over the cab, than you can without a car over the cab?

A. Oh, yes.

Q. Will you explain?

THE WITNESS: Well, you mean—

MR. McNEES: I mean in equipment with cars over the cab.

THE WITNESS: You mean leaving this car off over the cab we could operate without having it?

MR. McNEES: Yes.

THE WITNESS: It throws the truck out of balance because you have to change the distribution of weight to throw most of the weight back of the rear axle, thereby relieving the weight on the front end and causing the outfit to bob.

BY MR. McNEES:

Q. Does it make any difference in the swing?

A. It does.

Q. Has your convoy, so far as you know, ever had any accident caused by reason of the car being carried over the cab?

A. Not any.

Q. Either in Pennsylvania or no place?

A. No.

Q. And you say you have been operating about eight years?

A. Eight years.

Q. Will you tell us whether the mileage you have rendered in any one year is comparable to other years that you have had?

A. Yes, for the last year; but former years per truck the mileage was about the same.

Q. What is now the per truck mileage per year?

A. About five or six thousand miles a year.

Q. About five or six thousand miles?

A. Yes, sir.

Q. Mr. Mordan, is it possible by any practical way to transport cars to New York, New Jersey or

Delaware without going through Pennsylvania from Detroit or Ohio?

A. Or Buffalo.

Q. Or Buffalo?

A. No, you must go through Pennsylvania.

Q. Couldn't you from Buffalo go around by way of New York city?

A. Through all that traffic? Ha! Ha! It wouldn't be practicable. Coming from Detroit you must hit Pennsylvania.

Q. Do you know whether you have more accidents in the operation of these carriers with a car over the cab or more accidents when the carriers are empty?

THE WITNESS: When the what?

MR. McNEES: When the cars are empty.

MR. KEITEL: May it please the court, that is objectionable without explanation.

THE COURT: You may cross-examine him, Mr. Keitel, if he knows.

THE WITNESS: My records indicate—

BY MR. McNEES:

Q. First, do you know or not?

A. Yes.

Q. Now, I will ask you if you will tell us what the records indicate?

A. They indicate it is just a slight percentage greater [empty] than it is loaded.

THE COURT: You will have to speak louder. The stenographer can't hear you, and I can't hear you either.

THE WITNESS: There is a slight percentage greater empty than there is loaded. It is very slight. It is almost fifty-fifty.

BY MR. McNEES:

Q. When loaded they always have a car over the cab?

A. Yes, sir.

Q. Then what you call empty they never have a car over the cab?

A. That's right.

Q. Can you tell us whether the car over the cab has any relation to accidents at all in your operations?

A. Yes. I think not.

MR. KEITEL: May it please the court, that is an opinion. Also we don't think this witness is competent to state it.

THE COURT: Why not? He is the only person that does know.

MR. KEITEL: He is asked whether the car has anything to do with accidents. He isn't in any position.

THE COURT: Oh, yes. He has told how many accidents he has. What was it, twenty-three to—

THE WITNESS: Twenty-three to three million miles.

THE COURT: I will put it this way. Were any of these accidents caused by having an automobile over the cab?

THE WITNESS: We investigated every accident, and you couldn't attribute one of them to the car over the cab.

MR. KEITEL: We object.

THE COURT: Why?

MR. KEITEL: He hasn't testified if the car was a contributing cause of the accident.

THE COURT: You can cross-examine.

MR. KEITEL: We object to that.

THE COURT: Your objection is overruled.

BY MR. McNEES:

Q. Who in general pays for the transportation of cars, the manufacturer or the receiver?

A. The receiver.

Q. Can you transport—I think you did answer—can you transport three cars on a four-car equipment?

A. No, sir.

Q. Is that true both as to physical operation and the cost of operation?

A. It is.

MR. McNEES: That's all.

BY MR. McNEES:

Q. Mr. Mordan, do you comply with the interstate commerce commission safety regulations as issued?

A. Yes.

Recross Examination

BY MR. KEITEL:

Q. Mr. Mordan, I believe you testified that you are engaged partly also in the driveaway business?

A. Just—that is very slight.

Q. What is the value of that business?

A. Driveaway—well, there isn't much of it.

Q. Well, how much?

A. Well, the percentage compared to the truck operation would be possibly one per cent.

Q. I believe you testified that you couldn't haul three cars on your four-car equipment?

A. That's right.

Q. Why is that?

A. Because the outfits are not built, so constructed that you could operate them with three cars on.

Q. There is room for three cars, isn't there?

A. Yes.

Q. When you say they are not built so they could be operated, at what speed do you have in mind?

A. Well, we always try to keep within the legal speed.

Q. Well, ten miles an hour? Could they be operated at ten miles per hour?

A. No, they can't be operated leaving the car off the cab.

Q. They can't be operated leaving the car off the cab?

A. They couldn't be operated at two miles an hour.

Q. Now, I believe you testified that some of your equipment couldn't be used in Ohio. Why is that?

A. They have a forty-foot law in Ohio.

Q. How long has that been in operation?

A. I can't say exactly—two years.

MR. McNEES: Keep your voice up.

THE WITNESS: Two years possibly.

BY MR. KEITEL:

Q. Prior to that time did you use this equipment in Illinois and Ohio?

A. Yes.

Q. Now, have you purchased any equipment since this law became effective in Pennsylvania?

A. No.

THE WITNESS: You are talking about the present law?

MR. KEITEL: I am talking about the law that we are concerned with in this suit.

THE WITNESS: No, I haven't. I didn't know what to buy. I couldn't buy.

BY MR. KEITEL:

Q. I also believe that you testified about the way that these cars are moored to the truck. What kind of a chain is used?

A. Three-eighths.

MR. KEITEL: Three-eighth inch.

BY MR. KEITEL:

Q. How many times is it wrapped around the axle?

A. Well, only once. Wrapping around the axle don't mark.

Q. You mean it is looped over the axle?

A. It is throwed around the axle.

Q. I believe you testified your equipment had a replacement value of four hundred thousand dollars. Is that correct?

A. Yes.

Q. On what basis do you make that replacement value?

A. From the present-day cost.

Q. Well, what type of equipment did you consider in figuring out how much it would cost to replace your equipment?

A. The same types here would cost you that much money.

Q. You didn't consider new equipment that would conform with this law?

A. They are all the same price truck.

Q. But you didn't consider new equipment as though it were to conform with this law?

A. They are all the same price.

Q. You didn't consider those prices?

A. I don't know. Naturally I would buy what would suit me the best.

Q. Now, you said the present book value was about one-third less. What was your basis of depreciation, what percentage?

A. We took into consideration the change of equipment.

Q. Well, what was your basis for that?

THE WITNESS: Just what do you mean by that?

BY MR. KEITEL:

Q. Well, now, you take the present equipment five years old, what percentage of depreciation would you allow?

A. Well, I don't happen to have any five years old.

Q. Well, did you figure it yourself?

A. No, I am taking this from my knowledge of the book records.

Q. Well, do you know how the book record was figured out, the depreciation?

A. Yes.

Q. Well, what was that basis?

A. Well, the trucks are depreciated a third.

Q. A third off?

A. I told you we figure actual depreciation. It is maybe a little hard for me to explain to you. We charge off a third on a truck and a quarter on trailer for a year.

Q. So that you have depreciated your truck to nothing in three years and your trailer to nothing in four years. Is that correct?

A. That's about right.

Q. How old are these trucks that you have?

A. Well, most of them is less than a year old.

(Plaintiffs' Exhibits 3-A to 3-G shown the witness.)

BY MR. KEITEL:

Q. Can you identify the various types and how many you have? I don't believe you did that. Can you do that?

A. I have thirty-one of Model A. I have got fifty-three of this (indicating) type here.

MR. KEITEL: Three-D.

THE WITNESS: Three-D—what is it? Thirty-eight or 39 of the others.

BY MR. KEITEL:

Q. Now, how old are these different models that you have?

A. Well, this (indicating) type here is less than a year old.

MR. McNEES: Three-D.

MR. KEITEL: Three-D type.

BY MR. KEITEL:

Q. Now, how old are the others?

A. There is some, I think this (indicating) one, possibly some others, older than this. Some of them then run back. But figuring on this (indicating) type here, Model A, there is four or five of those that is three years old in—say last June.

Q. Of model A you have some three years old?

A. There is just four or five of them was three years old last May.

Q. Do you allow anything in your book value?

A. I am talking about trailers. I am not talking about the tractors being that old. My last trucks are all less than—they are not that old.

Q. The tractors themselves?

A. I don't have tractors that is less than two

years old:

Q. They are all less than two years old?

A. That's right.

THE COURT: Adjourn court until two o'clock.

Whereupon (at 12:30 p. m.) court adjourned until 2 o'clock this afternoon.

Harrisburg, Pa.,
Monday Afternoon, November 8, 1937.

Pursuant to adjournment, court reconvened at 2 o'clock p. m., Monday, November 8, 1937, and the hearing was resumed as follows:

GUY S. MORDAN, a witness on the stand on behalf of the plaintiffs at the time of adjournment, being recalled for further examination, was examined and testified as follows:

Recross Examination—Continued

BY MR. KEITEL:

Q. Mr. Mordan, I believe this morning you testified concerning the value of your equipment, and we were questioning you about that when recess was declared. In your statement of claim that you have testified that you swore to you stated the value of your business as a whole, did you not?

A. Yes.

Q. What was that figure?

THE WITNESS: In my original bill of complaint?

MR. KEITEL: That's right.

THE WITNESS: The sum of seven hundred thousand.

BY MR. KEITEL:

Q. Has there been any change in that figure to date, would you say?

A. Well, not any material change.

Q. If this law goes into effect, just how much of that seven hundred thousand dollars would be a loss to you?

A. Well, that would be hard to say because it may take it all. Possibly it would take it all.

Q. Well, of what does that seven hundred thousand consist? Let's get at it that way.

A. That consists of investments and efforts.

Q. Approximately two hundred and seventy thousand in rolling equipment?

A. Rolling equipment at its book value.

Q. Well, would that two hundred and seventy thousand dollars worth of equipment be a total loss?

A. Yes, plus a lot more. That is book value to date. That doesn't say that is the actual value of the equipment.

Q. In other words, all the tractors and trailers you have on hand, you couldn't dispose of them?

A. Well, I don't know what—

Q. Is that your idea?

A. Yes, that is my idea because I don't know what I would do with them. They would be useless to me.

Q. There would be no resale value of the tractors?

A. There might be some.

Q. What other items did you include in your seven hundred thousand?

A. I have got terminals, I have got a shop set up.

Q. Repair shop?

A. Repair shop buildings.

Q. Could any of that equipment be used in the driveaway business?

A. No.

THE WITNESS: That is the equipment you are talking about?

MR. KEITEL: Yes.

THE WITNESS: No.

BY MR. KEITEL:

Q. Well, could any of your assets be used in the driveaway business?

A. I don't have any driveaway business to speak of.

Q. You have some driveaway business?

A. Well, it is a trifle.

Q. I believe you testified this morning you applied to the interstate commerce commission for a permit and received plates?

A. I said I had applied for a certificate. I have had a hearing, but I haven't received any certificate yet.

Q. In your application did you ask for a separate classification on your haulaway and driveaway business?

A. Yes.

Q. What was your reason for that?

A. Well, they are two separate operations, that is as far as interstate commerce is concerned. One is motor vehicle and one is driving on its own power.

Q. Well, did you state any other difference in your application?

A. I don't think so.

Q. Did you say anything about the safety problem involved being different?

A. I don't think so, not to my recollection.

Q. Now, in your testimony concerning the loss on the use of this equipment, I believe you said it couldn't be used without a car over the cab. Is that correct?

A. That is correct.

Q. Did you make any attempt to change the equipment so that it would comply with the act?

A. That is impossible.

Q. Well, did you make any attempt?

A. No.

(Plaintiffs' Exhibit 3-G shown the witness.)

BY MR. KEITEL:

Q. Now, I refer you to Plaintiffs' Exhibit 3-G, model A and model E. Do you have that?

A. I know what it is.

Q. Now, look at model E?

THE WITNESS: This (indicating) one here?

MR. KEITEL: Yes.

Will you give it to the court?

(Paper handed to the court.)

BY MR. KEITEL:

Q. If this car were moved from over the cab what would happen?

A. It would unbalance your truck, your tractor, your whole load.

Q. Why would it unbalance it?

A. See, that (indicating) is the fifth wheel.

Q. You mean the point of the chasis?

A. Yes.

MR. KEITEL: All right.

THE WITNESS: It is back of the axle.

MR. KEITEL: That is correct.

BY MR. KEITEL:

Q. Now, what would be the result of that change?

THE WITNESS: All right, you take this weight off here (indicating), what will happen to your tractor?

MR. KEITEL: Raise the front wheels off the road.

THE WITNESS: It will lift the weight off of it.

BY MR. KEITEL:

Q. What would happen?

A. You can't steer it.

Q. All right, why can't the so-called fifth wheel be moved in front of the rear axle of the truck, tractor?

A. Your frame, and this doesn't show the extension of this frame, this frame here (indicating), and your tractor is too long, the wheel base of the tractor, to use it. You would have to disregard it.

Q. What is wrong about that?

A. You wouldn't properly balance the outfit. Those trucks and tractors are built to be balanced. You have to produce an altogether different tractor to even attempt to do anything.

Q. Why wouldn't it balance if the fifth wheel was ahead of the tractor?

A. Because your wheel base is too long.

Q. Why?

A. Because it is built that way.

Q. What does it have to do with the balance?

A. It does.

Q. What does it have to do?

A. I am not an engineer, but in driving these vehicles this frame here (indicating) extends too long from this (indicating) hub here back on this

(indicating) part of the outfit. You have got to have a short tractor.

Q. Can't that be provided for?

A. No, the springs is back there. You would injure your springs. You have got to have springs under it.

Q. Well, if the fifth wheel were placed ahead of the rear wheel of the tractor you wouldn't have this problem of lifting the wheels off the roadway?

A. If you properly balance it, which you can't do with that truck.

Q. Answer my question. If the fifth wheel were placed ahead of the axle, would you have any up-pull on the front of the axle?

A. Not if you had weight there. But it is impossible to get it. You have got a turning radius under there. It doesn't show. You can't lift that too high or you will get into trouble here (indicating).

Q. Did you consult anybody as to whether that could be done?

A. I have driven them and designed them.

Q. Did you consult any designer?

A. I practically designed it myself.

Q. This is solely your opinion that this can't be done?

A. Plus engineers.

Q. The accident figures that you mentioned this morning, were they all accidents in Pennsylvania or in your entire field of operation?

A. Entire field.

Q. You don't have any separate figures for Pennsylvania?

A. No.

Q. Now, I think you stated how you loaded this

equipment this morning. Let me ask you some more about that. Do you ever deliver less than a full cargo? Do you ever deliver less than four with this four-car equipment?

A. No, we don't.

Q. In other words, when you arrive at your destination you always deliver four at that destination. Is that correct?

A. Well, we never leave our terminal with less than four on. Now, it is possible to take the weight off to some extent of the loads, and we put the first drop-off on the rear. It is possible to operate that outfit with one car off the rear.

Q. So the car that will be dropped first would be loaded last?

A. That's right.

Q. On a given load you have the same model of automobile. What do you haul?

A. Well, we haul Plymouths.

Q. Well, do you have the same size cars on each load?

A. Ours are mostly Dodge and Plymouth.

Q. What is the lightest?

A. The Terraplanes.

Q. What is the heaviest car you carry?

A. Well, I think it's a Packard.

Q. Do you have any idea of the weights of those types of automobiles?

A. Well, the heaviest Packard is around I would say forty-five hundred that we haul.

Q. What is the lighest Terraplane?

A. Around twenty-eight hundred.

Q. Let me ask you this: On this model E, suppose the two cars to be dropped were Packards and therefore they were the last two on the trailer.

would that have any effect on the balance of your truck trailer?

A. We don't haul Packards on this type of unit haul.

Q. On what type do you haul them?

A. Model A.

Q. What is the heaviest car you haul on model E?

A. Dodge.

Q. How much does that weigh?

A. About three thousand. They all run about alike.

Q. Practically the same as the Terraplanes?

(No audible answer.)

Q. Now, do you ever split your loads in a way that you would have less than three on your vehicle?

THE WITNESS: On the four-car outfit?

MR. KEITEL: Yes.

THE WITNESS: No.

BY MR. KEITEL:

Q. You never dropped more than one?

A. No.

Q. When the one is dropped what is the practice of the driver? Does he leave the remaining vehicles where they are or move them back?

A. He doesn't need to move them back if he takes one off, but if there should be a case of that kind he wouldn't have to, not to my knowledge. I don't know of any in all my operations.

Q. With just one off your drivers don't move them back?

A. That's right.

Q. I believe this morning you testified that you were in no other business. Is that correct?

A. That is that I spend my time with. I might have a few interests, but not that I am active in.

Q. I believe you mentioned the places where you had your offices. Did you include Erie in that list?

A. No.

Q. Do you have an office there?

A. No.

Q. All your equipment is made by the people that, whose charts these (indicating) are. Is that correct?

A. No.

Q. Well, who does make the rest of them?

A. They make ninety per cent of them.

Q. Who makes the balance of them?

A. The other ten per cent is made in Buffalo, Dunn & Wahling.

(Paper shown the witness.)

BY MR. KEITEL:

Q. Mr. Mordan, I show you an application to the interstate commerce commission, Subject A, Statement No. 1, and refer you to paragraph C. Will you note in there this sentence: "This (meaning drive-away operations)—" Well, explain, explain what you had in mind in that statement?

THE WITNESS: Which sentence are you talking about?

MR. KEITEL: C, the whole business.

BY MR. KEITEL:

Q. Is there any statement contained in there to the effect that the operation of haulaway and drive-away have dissimilar problems from a safety standpoint?

A. There is.

Q. So that you would revise your previous answer on that point?

(Witness examines paper.)

THE WITNESS: It is dissimilar from the truckaway operations.

BY MR. KEITEL:

Q. Which statement is correct, the statement you made previously, the one in the application?

THE WITNESS: What was my statement previous to that?

MR. KEITEL: I believe I asked you whether in your application you stated that the two operations were dissimilar from a safety standpoint, and I believe your answer was, "I don't think so."

THE WITNESS: I believe you asked me whether I said anything about the safety regulations in my driveaway application. I didn't say anything about applications.

BY MR. KEITEL:

Q. Is this statement correct in the application as I have shown it to you?

A. It is.

MR. KEITEL: That's all.

Redirect Examination

BY MR. McNEES:

Q. Mr. Mordan, I don't believe we have on record what the driveaway operation is. What is that?

A. A driveaway operation is where you drive a car away under its own power.

Q. There is no trucking in that at all?

A. There is no trucking in that at all.

Q. Would you tell us whether ten per cent of your equipment that was made by someone other

than the one who made this equipment is similar in type?

A. Exactly.

Q. You said something about a chain of three-eighths of an inch. Have you since obtained a chain?

A. Yes, we did.

Plaintiffs' Exhibit No. 4 identified.

(Chain marked Plaintiffs' Exhibit No. 4 shown the witness.)

BY MR. McNEES:

Q. I show you four links of a chain and ask you if this is the type of chain you referred to?

A. Yes, sir.

Q. Is that what you call a three-eighths chain?

A. That is what we call three-eighths.

Q. Mr. Mordan, we have a chain, as I said before, marked Plaintiffs' Exhibit No. 4, identified as Plaintiffs' Exhibit No. 4, and I ask you if that is part of a chain that is actually used or is it merely a demonstrator?

A. No, that is actually in use.

MR. McNEES: We offer in evidence Exhibit No. 4.

Recross Examination

BY MR. KEITEL:

Q. Mr. Mordan, could a driveaway operation include trucks?

A. In a convoy it couldn't include transportation by hauling.

Q. No, but a driveaway?

A. You could drive a single truck.

THE WITNESS: Is that what you mean?

MR. KEITEL: Yes.

THE WITNESS: Sure you could drive a single truck.

BY MR. KEITEL:

Q. When you refer to driveaway business what do you mean?

A. I mean trucks, by other cars.

Q. What is the material of that chain?

A. I think that is—somebody who knows steel and iron can tell you maybe better than I can.

MR. KEITEL: That's all.

MR. McNEES: That's all.

(Discussion off the record.)

WILLIAM LAWRENCE, called as a witness on behalf of the plaintiffs, being duly sworn, was examined and testified as follows:

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Lawrence?

A. Cleveland, Ohio.

Q. What is your business?

A. Safety director U. S. Truck Line.

Q. What is the U. S. Truck Line?

A. It is the parent company operating in eighteen companies.

Q. Do they have any trucks?

A. Yes.

Q. How many trucks?

A. Between four and five thousand pieces, company owned pieces.

Q. That is a general freight business as well as convoy business?

A. Several specialized businesses as well as in the freight business.

Q. And what is your particular duty with the company?

A. Safety promotion work.

Q. How long have you been engaged in that with this company?

A. Ever since the company was formed.

Q. When?

A. The company was formed, as I recall it, about 1933. I was with one of the original companies of this particular group from 1930.

Q. And prior to that did you have any experience with motor operation?

A. I was special investigator of the public utility commission of Ohio.

Q. Investigating accidents?

A. Investigation of violations of the motor law, accidents or anything that came under the control of the commission.

Q. Are you responsible in recommending policies in connection with safety?

A. I am.

Q. In that connection do you have any records from which you can quote and read affecting the safety operation of car carriers, as we call them?

A. Yes, sir.

MR. KEITEL: May it please the court, we make the same objection to those figures as to the figures introduced this morning.

THE COURT: Same ruling.

MR. McNEES: I believe in view of the objection I better qualify him a little more.

BY MR. McNEES:

Q. Mr. Lawrence, where did you get the figures

you are about to testify to?

A. I got them from the operating heads of the various companies, the figures which are compiled under my supervision in connection with our insurance carriage and our safety promotion work.

Q. Do you have anything to do with the form in which reports are made?

A. Yes, sir; I organized the system that is used.

Q. How close contact do you make? The actual reports, are they made to you?

A. They are made to my office; yes, sir.

Q. And is the entire matter of analyzing the set-up afterwards under your direction?

A. Yes, sir.

Q. Will you tell us what you have that represents directly accident frequency in the transportation of cars over the cab of the car carrier?

A. Well, that is asking a question that I think I should attempt to qualify before answering the question. We maintain in these separate division companies separate types of equipment. As I understand the present law in question here, as compared to reports I have received from our company managers, it does not matter what type of equipment is operated the police have held that any portion of the vehicle being carried extending over the cab is a violation of law. We do have some equipment of the type discussed with one of the cars resting either wholly or in part upon ramps that are made part of the tractor trailer chassis, and we also maintain—

Q. In that case does the car ride entirely over the cab?

A. In some instances the whole, some instances partially. The weight is borne on top of the tractor or hauls the rear car upon the chassis of the tractor.

They will be over the cab or rest on the tractor itself. It should have from one to two cars held inside in the case of a tractor or semitractor and one on top or one riding on the end. That style of tractor will have a bumper extending out over the tail of the trailer. So it does extend over the cab of the vehicle. These are the alleged violations the police officers of the state of Pennsylvania have charged us with.

Q. So far as you know, would all your equipment operated in Pennsylvania result in some part of the car being over the cab?

A. Yes, sir.

Q. By the way, is all of your Pennsylvania business interstate or intrastate?

A. Interstate.

Q. You have no local intrastate business in Pennsylvania?

A. No.

Q. Now, do you have any accident records involving these car carriers?

A. Yes, sir.

Q. Can you give them to me?

A. I can give them to you. They are very much in detail.

Q. Can you summarize? Can you tell us, first, do you in all your records know of a case of one accident that was caused in Pennsylvania by reason of the fact that a car was either partly or wholly over the cab of the carrier?

A. We have never in the way of a break-down had anything to indicate that that single feature of our carrier has been attributable to the accident. That is an answer to the question.

Q. Is that true in Pennsylvania or of every state?

A. That is every state.

Q. Can you tell us your accident frequency as compared with the accident frequency of general freight hauling, or can you tell us whether it is greater or less, if you don't have the exact figures?

A. I have some figures I can give off right on the jump, being in the organization and safety work in the truck companies and prepared for this hearing here. All I have is for this purpose, and I do have the mileage tables of accidents from January first, 1937, to August first, 1937, which includes those companies that haul into the state of Pennsylvania. In order to explain that clearly, there is no break-down of the actual mileage in a particular state. It is shown as totals of the operations of these companies. To clarify the operation in the state of Pennsylvania, to the best of my knowledge every Chevrolet that is delivered in the state of Pennsylvania by automobile carrier is delivered by one or the other of our divisions. These divisions are located at Tarrytown, New York, Linden, New Jersey, Baltimore, Maryland, Buffalo, New York, Norwood, Ohio, and Flint, Michigan. Norwood, Ohio, and Flint, Michigan, seldom if ever come into the state of Pennsylvania unless it is through some difficulty in the plant or required distribution out of the zone in that particular plant, possibly due to changed conditions over which we have no control and have little authority to speak, has caused a change of distribution from Philadelphia, Erie and to Tarrytown, Flint, Michigan, and Baltimore. So fas as Pennsylvania is concerned, those mileages appertaining in that territory operated were one million nine hundred and eleven thousand nine hundred and eighty-seven miles. They averaged thirty-seven accident reports in that period of time.

After a review of each accident report by what we call our safety board, the accidents presented to the board in each company or plant, it was found that in the thirty-seven reports there was some degree of negligence or violation of company rules or instructions on the part of our drivers of nineteen accidents. That means there was an accident report for every fifty-one thousand six hundred and seventy-five miles, with the same haul includes a charge against our driving for one hundred and six thousand two hundred and twenty-two miles on the driver. Now, to clarify that, the record as it appears would not appear probably if it was taken from insurance companies' records instead of our records. We are probably a hundred per cent self-insured. We probably have the most peculiar insurance set-up of any trucking organization in the field, and it is to our interest to break down to the last degree in safety of accident prevention inasmuch as these things, that is the set-up, is reported to us at the end of the fiscal year. So that we require an accident report to be made regardless of how trifling the accident may be. In addition to that it is a generally known rule throughout the system that the two unforgivable sins are failure to file an accident report regardless how trifling or even if the driver sustains some claim alleged to his operation because of his being in the vicinity of the accident. I mean accidents where the driver may be located at the scene of the accident but where there is no impact with his vehicle. The second of the unforgivable sins is for a driver to go before the safety board and lie about those conditions.

Q. So you think you get practically complete reports from your drivers?

A. The insurance experts tell us we have come

closer to the figures than any organization they know of. There are other organizations that have these features with the same results, but the figures of those companies have varied. Linden, New Jersey, has been in operation since May. In that time they have traveled three hundred and thirty-five thousand seven hundred and twenty-nine miles. In that period of time they filed three accident reports with only one accident showing any degree of negligence on the part of the driver.

Q. Now, Mr. Lawrence, without going into details for all of the companies, what would that approximate, the average?

A. They average all the way from—well, a variety in average. Some of these companies don't travel the miles, so that they don't have the same ratio of accidents and don't get the mileage average some of the other companies get. We have one that has traveled five hundred and fifty-five miles without an accident.

Q. That is operating these car carriers?

A. Yes, sir; these travel the division that operates into Pennsylvania.

Q. Now, when you tell us how many the accidents number, are you including every type, even the smallest, in those numbers?

A. Oh, yes, this includes all accidents, a very large portion of our accidents that really concern accidents around the yard. Most people classify them as violation of rules. Our contention is a man who is apt to be lax around the yard and bang up equipment is apt to be careless on the road.

Q. And these reports cover accidents on your own property?

A. Oh, yes. These accidents also include fires and things of that kind.

Q. You haven't reduced your figures to show the accidents per hundred thousand miles. You haven't that set-up?

THE WITNESS: You mean how many accidents per hundred thousand miles?

MR. McNEES: Yes.

THE WITNESS: Only what I have told, that it varies per accident report filed, and also chargeable accidents.

BY MR. McNEES:

Q. You have had three hundred and thirty-five miles traveled with three accidents. Would you have any less than that?

A. We only had one accident to that three hundred and thirty-five miles, and that didn't involve the general public.

Q. Would you say the frequency would be less than one point thirty-three?

A. I have figured it that is what it would hold.

Q. Now, do you take any precaution in obtaining drivers for those car carriers to secure a high-grade of drivers?

A. Oh, yes, sir.

Q. What do you do about that?

A. Well, we start in with physical examination and personal qualifications for drivers on that job, with supervising officers responsible for employing them, and put them on what is known as a probation period, a six months' probation period, and from that on they are constantly subject to accident prevention educational campaigns with meetings, and carried on weekly at each terminal and review of accidents before the safety board where accidents are involved, and then establish an award and merit system for those men who go through exceptional

periods of time with no reports whatsoever at all.

Q. Do you think that award covers up by causing the men avoiding all reporting?

A. No. I only know of one instance where that was even attempted, and it didn't work out so well for the driver.

(Plaintiffs' Exhibit 3-G shown the witness.)

BY MR. McNEES:

Q. And so while you are a safety man and primarily not in the field, do you know anything about particular equipment such as here, model A on Exhibit G, having a car over the cab?

A. I wouldn't say I do. My work is primarily working on the accident end in determining the cause of accidents and running down the general frequency: but as for speaking as an expert on a particular type of equipment, I wouldn't attempt to do it. All I can speak of is results.

Q. Do you know whether or not in accidents that have happened with cars over the cab there has been an increase of loss or damage by reason of the car being over the cab?

A. Not to my knowledge.

Q. We haven't asked anything about your figures concerning car carriers. Will you tell us whether or not they show a better safety record or worse safety record than the figures covering general freight hauling?

A. They show a much better record. And it is the same situation I testified to before, namely, the cargo has a very little to do with the particular type of operation. It is a question of supervision.

MR. KEITEL: May it please the court, that comparison must be restricted to similar types

or conditions.

THE COURT: Certainly.

BY MR. McNEES:

Q. Mr. Lawrence, in your general freight hauling do you use any trucks that have any part of the body over the cab in such things as moving vans or large equipment of that sort?

A. We use large equipment with large cabs of one type. One thing is furniture hauling, or there may be types we have to provide for in attempting to take advantage of that extra space and build a ramp over the top.

Q. Is it correct to say in your freight hauling you have carried no cargo over the cab and in your car hauling you carry part of the cargo over the cab in all cases, and you have a better safety record in car hauling?

A. As a matter of accidents, it is one our entire safety force is centralized on. That is the reason I have to leave today.

Q. Are you engaged especially on the freight hauling end of the job?

A. No, it is all one job to me.

MR. McNEES: That's all.

THE COURT: Could that truck be used without putting one of the cars on top of the cab or partially on top?

THE WITNESS: Some of them could and some couldn't. We have vehicles that operate into the state of Kentucky, for instance. Their designing construction is such it would be almost impossible to operate with them. From my own observation and experience that has been secured with convoy companies which operate equipment, I find, even if it is designed

for a particular type and they want to use it for something else, the simplest method is to start all over again.

Cross Examination

BY MR. KEITEL:

Q. Mr. Lawrence, do you know of any accidents in which carriers were hauling automobiles over the cab in which those were involved where the presence of the car over the cab aggravated the nature of the accident?

A. Not to my knowledge.

Q. I believe you said you knew of none that caused the accident?

A. I mean that in this way, in analyzing our accidents we analyze every accident before the board, and probably get a better picture of every situation, the majority if not all, the claim being subject to thorough investigation and final disposition; and in all cases the insurance adjusters, those men sit down and take each accident, they bring the driver and the operator of the vehicles, that we may determine wherein the rules and regulations have not been followed, and I find it is only a small fraction of one per cent. In all those reports of accidents I know of no instance in the set-up of those reports, and I have collected them and checked them, either all or a majority of the concerns, and I know of no instance that the cargo did cause the accident.

Q. Do you know of any accidents where the cargo injured anyone as a result of the accident?

A. No.

Q. What type of accident would you call one in which the car with the cab caused the accident?

A. I would refer to the same thing for example, a vehicle rounding a curve and went off the road.

You determine the cause of the tip-over or something of that nature.

Q. Due to the high center of gravity?

A. If there was such a thing as high center of gravity in that operation.

Q. Your figures as to these haulaways, I believe those figures include the haulaways in all operations?

A. No, I didn't go into it for that. I have a plan with me here.

Q. The figures you gave, for example, the Tarrytown outfit, that included the entire mileage on which those haulaways were operated?

A. That's right.

Q. But you include them, the haulaway as well as the driveaway?

A. That's right.

Q. So your figures don't accurately portray the time they were loaded for, say both trips?

A. Except this, I can state this: In recent months our greatest accidents in haulaway is the empty return, that is for various reasons and vary in different localities, but that happens to be a fact.

Q. In your opinion such figures include both trips?

A. Surely.

Q. You say you only know of one instance where an accident report wasn't filed?

A. That's right, and that wasn't in this division. It was in a local city operation.

Q. If there were any other accidents, you wouldn't know about them?

A. That is hard to say, the same as a man doesn't know what his wife's doing, but you soon find out. And the point I am driving at, with such a set-up we think it is a successful protection to both the

organization and the men, and if there is a chance for a man to cheat, there is more to lose than to gain.

Q. I believe you testified about a course of instruction you gave your drivers. Would you say your drivers are better than the average drivers?

A. I wouldn't say better than the average driver, but I say this, we do our best to get as high-grade drivers as possible.

Q. Your drivers would be better than those who never had the benefit of this course?

A. There is good, bad and indifferent, because I know a number of organizations that practically get as good results and maybe better in some instances without such a set-up such as we have.

Q. Where they don't give a course of education in the selection of drivers?

A. Maybe not a course of education in the selection, but their greater problem is supervision. If a man maintains supervision, he can do a lot more individually than he can do at long range. So we have to make it up with an elaborate system of education and instruction.

Q. You don't supervise them on the road?

A. Yes.

Q. Spotters?

A. Not spotters, but we have men out, though never with the cars.

Q. Don't you think that makes a man more careful?

A. He is more careful than some drivers.

Q. With the same degree of detail as your organization?

A. Maybe not.

Q. Your figures include the operation of these companies in all the states in which they operate.

Is that correct?

A. Well, I only cite part of the companies you see here. The automobile contract is with General Motors only, and it is not comparable with some other operations because our business is with the manufacturer and not the dealer.

Q. Those figures you have given us include states other than Pennsylvania?

A. Yes.

Q. What states?

A. We haul from Illinois to New York and all states east.

Q. It includes some from Illinois?

A. A very small portion of it.

Q. How about Ohio?

A. Yes.

Q. How about Kentucky?

A. Yes.

Q. Can you use the same kind of equipment in Illinois or Kentucky you can use in Pennsylvania?

A. You can't use the same kind of equipment. We use the same kind of equipment in Ohio and Pennsylvania, but not Kentucky. Kentucky is what we call a definite law state.

Q. What is the difference?

A. We haul down there under a loss policy, which is evident, since we made a contract with the Chevrolet at a loss.

Q. Is the equipment different?

A. Yes, it is what we call buck. It is all over the cab.

Q. Your equipment is different in those states?

A. I didn't get that far, but my figures do include those, yes.

MR. KEITEL: Just one more question.

BY MR. KEITEL:

Q. If your company was engaged in hauling from Erie to Philadelphia, we will say, with its present equipment, there being no question of interstate commerce, would the problems facing your company be the same as they are otherwise under this law?

THE WITNESS: Well, I don't quite understand that question.

BY MR. KEITEL:

Q. Well, now—

THE WITNESS: Do you mean this, if we were hauling from Erie to Philadelphia we could take the law as it is and comply with it without difficulty?

MR. KEITEL: Yes, that is my question.

THE WITNESS: Well, the answer to that would have to be no; that is demonstrated by the fact that the General Motors considered the removal of the plant in the Pittsburgh area, which we believe wouldn't be built as long as conditions in Pennsylvania are as they are now, and that is the reason the plant at Linden was built.

BY MR. KEITEL:

Q. And the conditions would be the same whether you were in intra or interstate commerce?

A. Oh, yes. The point I am trying to bring out is that this particular type of law is economically unsound as far as the distributor is concerned. That is our opinion at least.

Q. When was your Linden plant built?

A. The Linden plant was built around the first of May this year.

Q. That was before the effective date of this act?

A. Yes, but there had been so many other things hanging fire in Pennsylvania from the distribution standpoint no one felt it was safe to organize in this state.

MR. KEITEL: That's all.

Redirect Examination

BY MR. McNEES:

Q. Mr. Lawrence, may I ask how many units have you altogether that are car carrying units?

A. I don't know whether I have those figures in detail.

THE COURT: Mr. McNees, I didn't get one word of your question. What was the last word?

MR. McNEES: I asked if he knew the number of units he had in car carrying.

THE COURT: Car carrying. I thought it was tar carrying, and wondered what it meant.

THE WITNESS: I haven't those figures, I haven't some yet, and some I wired for, but the answers didn't come in in time for me to bring in. I have a telegram, which is an operation practically into the state of Pennsylvania, has fifty outfits, that is a tractor and a trailer with ramps over the cab, and fifty-five tanks; that is a hundred and five units.

BY MR. McNEES:

Q. Do you have any idea how many units you have in certain companies?

A. In round figures I would say we have—I imagine there have been some cuts in the east, in Tarrytown, but I imagine there is somewhere around four hundred of them.

Q. And I think you said practically all of them involved carrying a car over the cab?

A. Yes.

Recross Examination

BY MR. KEITEL:

Q. Do you know when you bought any?

A. There is hardly a month goes by that some members of the board don't come before the board for equipment.

Q. Would it be fair to say you have purchased some in the last four months?

A. I know some were purchased in the last thirty days, some purchased that hasn't been delivered yet.

Q. And it is the type you have testified to with the car wholly or partially over the cab?

A. It is the type of bumper, a part will protrude over the cab on all model equipment. You can't get away from it. It is that type, or ramp type.

MR. KEITEL: That's all.

Redirect Examination

BY MR. McNEES:

Q. We didn't ask you whether there were separate corporations in the car carrying business?

A. Yes, they are all separate legal entities.

Q. In all those involved in transportation through Pennsylvania, what would happen to that business if this act were effective?

A. Well, in Pennsylvania those companies hauled in the past year somewhere between twenty-five

and thirty thousand cars. Now, that will increase because the Linden plant will increase this year because that part of their business would be eliminated.

Q. Is that part of their business?

A. Yes, because we don't haul any Chevrolets, and it would mean hauling Plymouths and other types.

Recross Examination

BY MR. KEITEL:

Q. Does your new equipment come within the forty-foot-length requirement?

A. Yes, sir.

Q. Why is that?

A. Because so many states have adopted the forty-foot overhang for tractor trailer equipment. The interstate commerce commission will eventually order something of the same order, and you have a great possibility of that becoming the uniform length.

Q. And those that come within the forty-foot-length requirements are the tank type you described?

A. Yes.

Q. That is the only type?

A. All we have. I wouldn't in fact be in position to tell the number involved. Whether the act would involve them or not I don't know.

Q. And your recent purchases are of that type?

A. It is because our shop insists on them in the case of a convoy to put the over-hauls on top.

Q. Your recent purchases?

A. Yes. Wait a minute, I wish to correct that statement. Those operating in Kentucky are not.

We purchase new equipment periodically for Virginia and Kentucky, and that isn't tank outfit, but I say that is a permanent loss set-up.

JOHN G. REESER, called as a witness on behalf of the plaintiffs, being duly sworn, was examined and testified as follows:

Direct Examination

BY MR. McNEES:

Q. Where do your live, Mr. Reeser?

A. At Duncannon, R. D. 2.

Q. Did you file a bill in equity in one of the cases involved here?

A. Yes, sir.

Q. Did you individually sign it?

A. Yes, sir.

Q. Now, in what way are you—in what business are you?

A. Car hauling business.

Q. By yourself or somebody, someone else?

A. By myself.

Q. You are not incorporated?

A. No, sir.

Q. In the car hauling business where do you operate?

A. In to Philadelphia and Reading and to New Jersey and Delaware.

Q. Where from?

A. From Buffalo, New York and from Detroit, Michigan, by car carrier in wintertime.

Q. Do you do any business which is intrastate or is it all interstate?

A. It is all interstate.

Q. Do you have four-car carriers or is it three-car carriers?

A. I have one three-car carrier.

Q. Are all of your four-car carriers, the kind with part of the automobile over the cab?

A. Yes, sir; they are all built that way.

Q. How many have the whole car over the cab?

A. They are all over the cab.

(Plaintiffs' Exhibit 3-A shown the witness.)

BY MR. McNEES:

Q. May I ask you if they are generally of the type shown on Exhibit 3-A?

A. I have two of this type.

Q. Of the 3-A type?

A. Yes.

(Plaintiffs' Exhibits 3-A to 3-G shown the witness.)

BY MR. McNEES:

Q. Now, in any of these exhibits which follow is there a sample of your other cars?

A. I have three of this (indicating) type.

MR. McNEES: Referring to Exhibit 3-C.

THE WITNESS: The remainder of the tractors are built like this (indicating).

BY MR. McNEES:

Q. Like model RA on Exhibit 3-G?

A. With the trailer built like this (indicating) model A.

Q Like model A on the same exhibit?

A. Yes.

(Discussion off the record between the court and witness.)

BY MR. McNEES:

Q. Did you tell us how many units you have?

A. I have thirteen, twelve in operation.

Q. Do they all carry Pennsylvania licenses?

A. Yes, sir.

Q. Do you operate all of them pretty regularly, or how much business do you have?

A. Well, they are all operated pretty regularly.

Q. Now, can you operate any of them safely without a car over the cab?

A. No, I wouldn't attempt to bring a load in that way.

Q. You can operate them safely, can you, with the last car left off the unit?

A. Yes, at the rear.

THE COURT: Why wouldn't you attempt to operate if there wasn't a car on top of the cab?

THE WITNESS: The weight of the car and trailer back of the cab wouldn't balance the truck in front. You wouldn't have enough weight. If you got on a wet road you wouldn't have enough weight to hold you down to get your swing.

BY MR. McNEES:

Q. Do you know of accidents which you or your drivers have had which would be attributable to the fact that there was a car over the cab?

A. Not a one.

Q. May I ask you whether you have had any fatal accidents in Pennsylvania?

A. No.

Q. You carry insurance?

A. Yes, sir.

Q. Now, what would be the effect on your business if you were prohibited from carrying any car or any part of any car over the cab?

A. It would be a total loss as a car hauling business to me.

Q. Do you do any car hauling business that doesn't involve Pennsylvania?

A. Yes, I haul into New Jersey.

Q. Through Pennsylvania?

A. Yes, sir.

Q. Do you do any in which you do not travel over Pennsylvania?

A. No, not a bit.

Q. Would you be in a position to move your business to some other state even if it had no restriction on the car carriers?

A. This is my home, and I have—

Q. You have no business connections in any other state now?

A. No.

Q. Have you applied to the interstate commerce commission for the approval of a certificate for the business you are in?

A. Yes, sir.

Q. Was that under what is called the Grandfather clause?

A. Yes, sir.

Q. Do you know whether you would lose the entire Grandfather clause rights if you went some place else to conduct your business?

A. Yes, that is all written in the application.

(Discussion off the record.)

Cross Examination

BY MR. KEITEL:

Q. Mr. Reeser, who manufactured your trailers and semitrailers?

A. The first ones I had the Francis Trailer Company, New York City, built in Detroit, and the last ones I had built of my own design, built by Chris-

tianson & Son in New York.

Q. What material are those trailers made of?

A. Angle iron and channels.

Q. What are they?

A. Angle iron and channels welded together.

Q. How is the runway for the car over the cab constructed?

A. There is four posts set up around the cab and they are welded together and braced, and then the runway is placed over that.

Q. How are they placed at the bottom of the chassis?

A. They are either bolted to the chassis or welded to the chassis.

Q. Is there any reinforcement on the front of the chassis, any other reinforcement beside that?

A. It is just four posts that are put down to the frame bolted and welded fast, and then the braces over here (indicating), and then the runway is placed on top and welded to the frame.

Q. Is there any reinforcement across the chassis underneath?

A. Yes, the front member, the cross member in the chassis.

Q. Well, that is in when you get the tractor?

A. Yes, sir.

Q. What type of support up the side do you use?

A. It is a five-inch angle iron used as a post.

Q. And by angle iron you mean an L-shape?

A. Yes, sir.

Q. Have you made any attempt to so change the position of the fifth wheel that you can remove the car off the cab?

A. No, sir; I couldn't change this unless I

changed the whole equipment.

Q. Well, now, what steps did you take toward doing that?

A. I haven't made any effort to move that.

Q. How much would it cost you to change your equipment to do that?

A. So much we couldn't earn back what it cost until 1940 that it would justify to make the change.

Q. How old is your equipment?

A. There is one of them about eight months old.

Q. That is the tractor and the trailer?

A. Yes.

Q. Any younger than that?

A. There is a new one that I haven't attempted to operate yet because of the passage of this law.

Q. You purchased that recently?

A. I purchased it before the passage of the law.

Q. When did you purchase it?

A. I ordered it in February, and it was delivered some time in May.

Q. When did you first know about this law? When did you first know about this?

A. Some time prior to—from the time I ordered my truck until the delivery of it.

Q. Now, Mr. Reeser, I believe you haul Chrysler products and Packards?

A. That's right.

Q. Do you ever mix your loads on those? Do you ever haul more than one kind of car on one trip?

A. Oh, yes. On some of those straight trailers, we put our Packards on there, and the smaller cars over the cab.

Q. Which type is that now?

A. We will place our smaller cars on here (indicating) and the Packards, small cars, but the big Packards—

MR. KEITEL: He is referring to 3-A.

THE WITNESS: —are hauled on the trailers.

BY MR. KEITEL:

Q. Like model RT?

A. That's right.

(Discussion off the record.)

BY MR. KEITEL:

Q. Now, I believe when you first testified from Exhibit 3-G you referred to model R4, whereas you intended to refer to model R for your truck tractor. Is that right?

A. Yes, a mistake.

Q. Now, you say that you can haul all Packards in the trailer and the lighter cars on the tractor?

A. Haul the lighter Packards on the tractor also.

Q. But not the heavier ones?

A. No.

Q. Why can't you haul the heavier ones on the trailer?

A. We don't have the wheel space.

Q. Is that the only reason?

A. Yes.

Q. Now, if you were going to drop off a car on the way before you arrived at your final destination, where would it come off?

A. Off the rear.

Q. Would you make any readjustment of your load?

A. No.

Q. Do you ever drop two cars off?

A. No.

Q. You never drop more than one or less than three off one load?

A. Generally ninety-nine per cent is full load.

Q. Well, now, if you had heavier Packards on the rear and your lighter cars up over the cab and on the tractor, would there be any tendency because of that overweight to raise up the front wheels of your tractor?

THE WITNESS: By taking a car off the cab?

MR. KEITEL: No.

BY MR. KEITEL:

Q. If you leave it on there?

A. Oh, no.

Q. Now, if you place the heavy car in the number two position on the tractor and place your lighter cars on the trailer, would you have any lack of balance of your equipment?

A. Yes, sir.

THE WITNESS: That is by taking the car off the cab?

MR. KEITEL: That's right.

THE WITNESS: Yes, sir; it would throw the cab out of balance.

BY MR. KEITEL:

Q. I ask you whether you made any attempt to remedy that situation?

A. It can't be remedied unless you would construct it over.

Q. Your tractor would be—

A. You would have to stretch the wheel base.

Q. Why would you have to stretch the wheel base if put in front of the tractor?

A. You couldn't haul four automobiles.

Q. Could you haul three?

A. On the present freight rates it can't be done.

Q. You would lose money?

A. Yes, sir.

Q. It could be done otherwise?

A. Not with this present equipment unless there is part of the car over the cab to hold the front end down.

Q. If the fifth wheel was ahead of the tractor it could be done, is that a fact?

A. It can't be constructed to haul three cars by moving the fifth wheel.

THE COURT: What do you mean by the fifth wheel?

MR. KEITEL: That is the joint where the trailer is joined on the tractor.

THE COURT: I understand, but I don't understand why you call that a wheel.

MR. KEITEL: That is the idea—

THE COURT: Oh, I see. It is like the fifth wheel of a wagon?

MR. KEITEL: Yes.

(Discussion off the record.)

MR. KEITEL: That's all.

Redirect Examination

BY MR. McNEES:

Q. Mr. Reeser, do you comply with all the interstate requirements as issued by the interstate commerce commission?

A. Yes, sir.

ALFRED A. MAURER, called as a witness on behalf of the plaintiffs, being duly sworn, was examined and testified as follows:

Direct Examination

BY MR. McNEES:

Q. Where do you live?

A. Bloomsburg, Pennsylvania.

Q. In what business are you engaged?

A. Transporting automobiles.

Q. Under what name?

A. Maurer & Myers Auto Convoy.

Q. Incorporated or what?

A. Partnership.

Q. You are one of the partners?

A. Right.

Q. Is it true that your business is entirely that of carrying automobiles on car carriers?

A. That's right.

Q. How much of it is interstate?

A. All of it.

Q. How many pieces of equipment do you operate?

A. Today we have thirty-five operating.

Q. How many Pennsylvania licenses do you carry?

A. Thirty-four.

Q. Do all of your trucks operate in or through Pennsylvania?

A. Yes.

Q. How many of your car carriers have a car over the cab when they are loaded?

THE WITNESS: Either wholly or partially or how?

MR. McNEES: Well, wholly.

THE WITNESS: Wholly, we have—we have five partially, ten that are not affected at all, and the rest are wholly.

BY MR. McNEES:

Q. Now, of those where you carry—well, may I ask you this: Do all your equipment carry four cars or do you have some carrying less?

A. We have four running that carry three.

Q. Do you operate any equipment designed to carry four cars in which you could safely leave off the car over the cab?

A. None.

Q. How do you know that wouldn't be a safe operation?

A. We tried it there at home in our yard. It wouldn't work.

Q. Were you present at the time it was tried?

THE COURT: When I was in school I had a professor in mathematics ask whether I could factor three by three by three.

BY MR. McNEES:

Q. Are you responsible for the operation of the business?

A. I am.

Q. And are the vehicles you couldn't operate without a car over the cab of that type equipment?

A. Positively.

Q. Can you tell us on what you base that?

A. Well, it would throw it out of balance.

Q. You mean it would tend to throw it out of balance sideways?

A. No, it would lighten the weight on the front wheels, and also it wouldn't be safe to operate it.

(Plaintiffs' Exhibits 3-A to 3-G shown the witness.)

BY MR. McNEES:

Q. Would you tell us generally or specifically if you can what type of equipment, referring to the exhibits which are in?

THE WITNESS: Do you want the list and the number separate, or do you want them all together?

MR. McNEES: Let's just have the list of equipment, if you have it.

THE WITNESS: List of equipment?

MR. McNEES: Yes.

THE WITNESS: We operate two of those (indicating).

MR. McNEES: Shown on Exhibit 3-A.

THE WITNESS: Wait a minute. One of these (indicating) and one of these (indicating).

MR. McNEES: May I state for the witness, pointing to Exhibit 3-A? He says he has one of those.

BY MR. McNEES:

Q. And one of those shown on Exhibit 3-B?

A. Right. Four of these (indicating) shown on Exhibit 3-C.

MR. McNEES: Shown on 3-C.

THE WITNESS: Two of these (indicating).

BY MR. McNEES:

Q. Shown on what?

A. Two of those, 3-E.

Q. Three-E?

A. Well, it is a combination of this (indicating) model R4T, and the trailer is model A.

Q. In other words, the tractor is the same as these here (indicating) and the model is Model A?

THE COURT: "These here" doesn't mean anything.

MR. McNEES: The same as model R4T.

THE WITNESS: And we have four of these (indicating) model A, but they are the least of the equipment.

BY MR. McNEES:

Q. The models to which you have just been referring are shown on Exhibit 3-G?

A. Three-G.

Q. Will you tell us the effect on your business if all of the equipment carrying a car or part of a car over the cab is ruled off the road?

A. It would ruin us.

Q. Have you made application to the interstate commerce commission for any rights?

A. Yes, we have.

Q. Under the Grandfather clause?

A. Yes.

Q. Is it correct that under that clause you may exercise only those rights which you already exercised before the date of the act?

A. That's right.

Q. So you couldn't move your business anywhere else if you wanted to?

A. That's right.

Q. Do you know of any accidents in the operation of your car carriers which were caused wholly or partly by reason of the fact that there was a car either wholly or partly over the cab?

A. No, not that we would attribute to that.

Q. Now, do you think equipment such as you operate is safer with a car over the cab or safer without any load on it at all?

THE WITNESS: You mean empty or loaded?

MR. McNEES: Yes, empty.

THE WITNESS: Well, the equipment as far as loaded and empty is concerned, I would say they are as safe one way as the other.

BY MR. McNEES:

Q. What has been your experience with loaded and unloaded equipment?

A. I have just checked the record. The record shows two accidents in two million miles loaded and

eighteen accidents empty.

MR. KEITEL: How many miles?

THE WITNESS: Two million miles.

BY MR. McNEES:

Q. You have the same ratio of accidents?

A. Yes.

Q. And you say two accidents loaded and eighteen unloaded?

A. Yes, sir.

Q. Do you have a complete record of accidents?

A. The drivers would be discharged if they didn't report them.

Q. If they don't report, you wouldn't know of them?

A. Nevertheless we know of them.

Q. Do you comply with all the provisions of the interstate commerce commission?

A. Yes, we have.

Q. Do you know of any accidents or have you seen any either of a truck carrier or the car carrier or car in the accident in which the car over the cab was involved?

THE WITNESS: In which the car with a cab was involved?

MR. McNEES: Yes, in any way.

THE WITNESS: I haven't personally seen any accident.

BY MR. McNEES:

Q. Did you see the car or the carrier after the accident in which the car over the cab was damaged?

A. Yes.

Q. Will you explain that to us.

THE WITNESS: You mean to show how strong the ramp is?

MR. McNEES: As far as you know.

THE WITNESS: One of our carriers, that

was in 1935, one of our carriers got off the road, or one of our drivers got off the road—by the way, this (indicating) is the type of vehicle here.

BY MR. McNEES:

Q. Will you name it by number so that we can put it on the record?

A. It is model E, that's what it is, on Exhibit 3-G.

Q. Model E?

A. That's right, model E on Exhibit G.

Q. That is the type that carries the car over the cab?

A. That's right.

Q. What happened in that accident?

A. He got off the road coming down hill, and tried to go under a bridge that was two or three feet too low off the road, and going down the steep hill never stopped it in time to go through. Probably he was going pretty rapidly when he hit it, and he flattened out the car, just flattened it down flat, and it never bent the bolt or broke a rope on the ramp. That was after the accident.

Q. Were you able to use that car carrier with cars on the cab the same after the accident as before?

A. Yes, without any repairs we are still using it.

Q. How about the car?

A. The car was so completely damaged it wasn't worth anything but junk.

Q. You say the car was flattened down. Where was it? Did it stay on the ramp?

A. It moved back about two feet, but it stayed on the ramp.

Q. Was the car brought to your place with the car on the ramp?

A. Yes, it was.

THE COURT: What was that, a Chevrolet?

THE WITNESS: I don't recall; a Dodge, I believe.

THE COURT: I didn't hear of your hauling any Cadillacs?

THE WITNESS: There isn't much value in Cadillacs and heavy cars.

BY MR. McNEES:

Q. But you operate your thirty-five pieces of equipment pretty regularly, you state?

A. Yes, I do.

Q. That is your sole business, is it?

A. That is all we do.

Q. Do you know what your gross receipts are for a year?

A. Our gross receipts this year are over two hundred thousand dollars.

Q. For this calendar year?

A. From January first up until this date.

Q. How many men do you employ?

A. Right now I believe we have seventy, seventy or seventy-two.

Q. Are many of those Pennsylvania residents?

A. All of them.

Q. Do you have any other work you could give them or know of any they could find if you were required to cease this operation?

A. No, we do not.

MR. McNEES: That's all.

Cross Examination

BY MR. KEITEL:

Q. Have you made any attempt to reconstruct your equipment so as to comply with the law?

A. No, it is impossible to change it.

Q. Well, have you made any attempt?

A. No, we have not.

Q. Have you made any attempt to fix it so it would carry only three cars?

A. No, we have not. In the first place, according to our figures three cars are unprofitable, and the cost also in order to change the equipment would be excessive. You couldn't change it over so it would be safe to operate.

Q. You couldn't change it so the fifth wheel would be ahead of the tractor?

A. You might put it, but most of the equipment we have uses that to carry the semitrailer behind what they call the straight trailer. That is this (indicating) combination, two cars on the truck and then the straight trailer.

Q. Which figure is that?

A. Model R4 is the truck tractor carrying two cars, and the trailer model A.

Q. Now, you say on that type of equipment if you take a car off the front of the cab you still have this up-pull?

A. Yes.

Q. With the tractor resting on it?

A. With the tractor resting on that car.

Q. Who has manufactured your equipment?

A. The front part of these types were mostly manufactured by Whitehead & Kaley and Francis, and the trailer part by Whitehead & Kaley.

Q. How recently have you bought some of this equipment? What is the most recent?

A. Some—we ourselves bought—the last ones we bought was in April.

Q. April of 1937?

A. Yes.

THE COURT: You don't have any trailers when they run at night that are noiseless, do you?

THE WITNESS: That depends on how they tie on their skids. It depends on the driver a lot.

THE COURT: Or not bumping the pavement?

THE WITNESS: That might be of some help, too.

BY MR. KEITEL:

Q. Do you have any equipment that doesn't come under the law?

A. Yes, we do.

THE WITNESS: You mean under this—

MR. KEITEL: Under this act.

THE WITNESS: Yes, we do.

BY MR. KEITEL:

Q. How many pieces?

A. Well, right now we have ten. Wait a minute—

Q. Have you purchased any of that since the effective date of the act?

A. Why, we haven't purchased—these are not ours, our own. There is only two of our own. The last of them are leased.

Q. Two of the ten?

A. That's right. And those two were bought in May, April or May, I am not positive—April, I guess.

Q. Do you have a truck which bears the license plates U-379F?

A. I am not sure, but I don't doubt they are all U licenses.

Q. Well, you recall making application for license plates on or about August seventeenth of this

THE WITNESS: August seventeenth?

MR. KEITEL: Yes.

THE WITNESS: U-397F?

MR. KEITEL: Three seven nine F.

THE WITNESS: Is that a new license or re—

MR. KEITEL: Well, I believe it was a new one.

THE WITNESS: We didn't buy anything to replace our trucks of course, or replace our trucks during the summer. We change our equipment every year.

BY MR. KEITEL:

Q. Do you recall making application for license?

A. I don't recall that at all.

Q. Do you recall purchasing any equipment in August?

A. No, we didn't purchase any in August. We traded some in and got new equipment, and that should be a transfer of tags.

Q. Well, were they transferred, that is the question, were they new?

THE WITNESS: New trucks, new tractors?

MR. KEITEL: Any new trailers?

THE WITNESS: Not since those two.

BY MR. KEITEL:

Q. The two in April?

A. The two in April, yes.

Q. Well, how many trucks did you buy since June twenty-ninth?

THE WITNESS: You mean transferred?

MR. KEITEL: Transferred, yes, whatever you want to say.

THE WITNESS: Since June twenty-ninth?

MR. KEITEL: Yes.

THE WITNESS: I wouldn't be able to give

you the accurate figures; five or six of them. We trade in all our old equipment between April and August or September. We trade them all in and get new equipment every year.

BY MR. KEITEL:

Q. Does any of that equipment carry four cars?

A. Yes.

Q. I think you described an accident with a loaded car over the cab. Have you had any serious accidents when your vehicles are empty?

A. Yes, I do sometimes.

Defendants' Exhibit A identified.

Defendants' Exhibit B identified.

(Defendants' Exhibits A and B shown the witness.)

BY MR. KEITEL:

Q. I show you two photographs marked for purposes of identification Defendants' Exhibit A and Defendants' Exhibit B, and ask you whether those photographs are pictures of your equipment?

A. Not our own. They are photographs of one of our leased operators.

Q. Now, can you recall the circumstances surrounding that accident?

A. We couldn't get very much information. We got some information from—

MR. McNEES: I merely want to bring to the court's attention without formal objection that the law refers to the time he is carrying the car over the cab, because these accidents occurred at another time. We want the court to have this information, and want the court to understand it isn't covered in the act.

MR. KEITEL: We agree with that.

THE COURT: Why encumber the record?

MR. KEITEL: It is my thought this accident

would have happened to the vehicle whether loaded or not, and clearly indicates what would happen to that vehicle by having a car over the cab.

MR. McNEES: We believe that is too remote.

THE COURT: I do too. We will hear it subject to your objection.

My impression is it is trying to base an hypothesis on an hypothesis.

BY MR. KEITEL:

Q. Do you know what caused this accident?

A. I absolutely don't. We have no reports. We have the report of the driver that was taken to the hospital after the accident, but we think he didn't know himself how it happened. He claims he was asleep.

Q. Do you know any reason why this accident couldn't have happened with a load over the cab?

A. No, but I say if it happened the car would still have been there.

Q. Then in your opinion the runway over this cab hasn't been interfered with in any material extent?

A. It has been interfered with a but you can see it was still there when they brought it in.

Q. When did you first know about this law?

A. I knew it before it was passed, pending.

Q. Did you make any statement regarding its effect on your business?

A. Yes, I did.

Q. Under what circumstances?

A. Well, we told them what it would do before it was passed.

Q. Well, did you make in any public hearing any statement concerning any effect upon your business?

A. I might have. I don't remember what I said. I can't remember back that far.

Q. Did you appear before any legislative committee considering this law?

A. Yes, I did.

Q. What did you tell them at that time?

A. I couldn't remember.

Q. Do you remember whether you said that you would be satisfied if this law were extended until the first of the year?

A. I don't believe I said that. I may have said it would help out if they extended it to the first of the year.

Q. Did you receive any impression about what they were going to do at that time?

A. Well, not exactly, no. They did tell us that they were going to extend a portion of it until 1940 and for the car over the cab make it effective immediately.

Q. Did you express any dissatisfaction with that idea?

A. Yes, I did, very much so.

MR. KEITEL: That's all.

Redirect Examination

BY MR. McNEES:

Q. Mr. Maurer, in cross examination you said that you had some equipment, two pieces I think, in which the car was not over the cab?

A. Or on, yes.

(Plaintiffs' Exhibits 3-A to 3-G shown the witness.)

BY MR. McNEES:

Q. Do we have any exhibit that shows that type of equipment, so we can refer to it?

A. Yes, we do. It is this (indicating) trailer.

Q. The trailer shown on Exhibit 3-F with the tractor shown on Exhibit 3-E?

A. Three-E.

Q. Now, in that combination is any part of the car over the cab?

A. No, not in that combination.

Q. Or the bumper or any part of the car?

A. No.

Q. Would that be true if you carry cars as long as the Chryslers and Packards?

A. No, I think we could put most anything on without extending over.

Q. You have two of those?

A. We have two of those.

Q. Are those what you call double-deckers?

A. Two-deck.

Q. Do you have any two-deck equipment in which any part of the car does go over the cab?

A. We own two of those.

Q. That is Exhibit 3-D?

A. Yes, sir.

Q. It is the same, the same shown on Exhibit 3-D as in Exhibit 3-F?

A. That's right.

Q. That is the end part of the car is on the trailer?

A. That's right.

Q. The weight is on the trailer in both cases?

A. Yes, sir.

Recross Examination

BY MR. KEITEL:

Q. I believe you said you replace your equipment every year?

A. Yes, sir.

Q. Do you mean you buy new tractors?

A. Yes.

Q. You purchase new tractors every year?

A. Yes.

THE COURT: Gentlemen, can we meet at nine-thirty tomorrow morning?

Adjourn court until nine-thirty tomorrow morning.

Whereupon (at 4 p. m.) court adjourned until 9:30 o'clock tomorrow morning.

Tuesday, November 9, 1937, 9:30 a. m.

MR. McNEES: If the Court please, we desire to recall Mr. Mordan.

GEORGE I. MORDAN, recalled.

Direct Examination

BY MR. McNEES:

Q. Mr. Mordan, we intended to ask you when you were on the stand before how many employees you had?

A. About one hundred and fifty.

Q. Can you tell us how many of those live in Pennsylvania?

A. About seventy per cent of them.

Q. You said your office is in Buffalo?

A. That's right.

Q. Now, how do your Pennsylvania people get to Buffalo to work on the trucks?

A. Well, my trucks come down through Pennsylvania, see, and, of course, they can very well live in Pennsylvania and come to Buffalo and pick

up a load, and on their way back through they stop off and see their families, because they drive right by their doors.

Q. Do most of the Pennsylvania residents, so far as you know, live right along the route which they travel?

A. They do.

Q. I want to ask you, also, were you in attendance at an Interstate Commerce Commission hearing on safety regulations of motor trucks?

A. I was.

Q. Did you testify?

A. I did.

Q. Did you or anyone there testify concerning the car carriers?

A. Yes, I did, and also Mr. Lawrence that testified here yesterday.

Q. Did either of you testify or hear testified at that hearing anything about convoys that carry cars over the cab?

A. Well, we were testifying in a general way—the car haulers—and, of course, Mr. Lawrence's outfits and my outfits all have car over the cab.

Q. Well, was that before the Commission that covered your type of operation that you were engaged in?

A. Yes, before an examiner of the I. C. C.

Q. When the final safety regulations came out, they contained nothing which applied specifically to this type of carrier?

A. You are speaking of the car over the cab?

Q. Yes.

A. No, they did not.

Q. Do you know or do you remember how long that particular matter of carriers of your type and Mr. Lawrence's type was before the Commission?

How long was it discussed?

A. Well, do you mean how long the hearing lasted?

Q. No, just your part where the convoys were discussed, or testimony given by persons who were only convoy carriers.

A. Well, you mean the time that I was on the stand, and Mr. Lawrence was on the stand?

Q. Yes, approximately.

A. Well, Mr. Lawrence was on the stand—oh, a couple of hours, I would say; and I was on the stand for about forty-five minutes.

Q. Do you remember any other persons who were engaged in the car carrying business who were called at that hearing?

A. I don't think so.

Q. Now, is it true that not nearly all of your testimony there, nor Mr. Lawrence's, was directly concerning the car over the cab, is that true?

A. I didn't get the question.

Q. Not nearly all of your testimony was concerning the carrying of cars over the cab?

A. No.

Q. Much of it concerned wrecks?

A. That's right, operations as a whole.

Q. But it did concern safety rules that the Commission was about to issue, which would affect you as carriers?

A. Yes.

Q. We neglected, also, to ask you what your annual gross receipts are?

A. I had those figures here with me yesterday, the exact figures, and I left them in my room, but I can tell you approximately—eight hundred and sixty-some thousand.

Q. And about what was your annual payroll?

A. My annual payroll was a hundred and ninety-four thousand and some odd dollars.

Q. Now, your gross receipts are from commerce involving the carriage of cars between states?

A. Pardon?

Q. You get your gross receipts from commerce involved in the carrying of cars between states or through states?

A. Through states—interstate.

Q. Can you tell us, roughly, the approximate proportion of payroll that goes to Pennsylvania residents?

A. A hundred and thirty-four thousand and some odd dollars.

Q. Do you know of any business in which you could place your men if they lost their employment?

A. Not any.

Cross Examination

BY MR. KEITEL:

Q. Mr. Mordan, how long was the total hearing before the Interstate Commerce Commission?

A. Well, I was there for two days, and it still continued after that.

Q. You were there when it started, were you?

A. I think I was. I think I was there on the first day. I was there on a Monday—I think that is the day it started in Washington. There had been a hearing on it before that in Chicago.

Q. Was there any testimony concerning these auto haulers given by anyone who was not connected with that business?

A. Well, not while I was there, no.

Q. As far as you know, just you and Mr. Lawrence?

A. That's right.

Q. Now, the employees that you testified to, are they all on full time?

A. Yes; that is, whenever we have work for them.

Q. Well, do you pay them by the hour or by the trip?

A. We pay them by the trip, by the mile.

Q. Are any of these Pennsylvania employees employed in your office?

A. No.

Q. What percentage of your employees are in the office?

A. Well, that is only a small per cent. I have eight in the office.

Q. I believe you testified that these employees would be out of a job if we enforce this law, is that correct?

A. They would be, as far as I am concerned.

Q. Why couldn't you employ them to drive equipment designed to carry three cars?

A. Because they also have a car over the cab.

Q. All equipment designed to carry three cars?

A. That's right.

Q. Every type on the market?

A. Every type I have.

Q. I am not talking about the type you have. Couldn't you purchase types to hold three cars, to comply with this Act?

A. Well, there isn't any on the highway that I know of that don't have a car over the cab.

Q. Not even three-car equipment?

A. No.

Q. Now, if that equipment were designed and placed on the market and you purchased it, you would require no fewer employees, would you?

A. I am not going to purchase it.

Q. Well, if you did, you would require no fewer employees?

A. No.

Q. If you engaged in the driveaway business, you would require no fewer employees, would you?

A. Well, that is impossible, to engage in the driveaway business.

Q. Well, you are active in it incidentally now, aren't you?

A. One per cent., as I said yesterday, and that is the heavy bulk types of trucks, and what not, that you can't load on those outfits.

Q. Well, suppose you decided to engage in it one hundred per cent.?

A. The manufacturer won't stand for it.

Q. Well, suppose you engage in it one hundred per cent., would you require any fewer employees?

A. Well, it's just still impossible.

Q. Well, now I am asking you a question. You are engaged in it partially. Now, suppose you engaged in it one hundred per cent., would you require any fewer employees?

A. No.

Q. Would you require more?

A. Yes.

Q. In your application to the Interstate Commerce Commission, what route did you designate for operation in Pennsylvania?

A. I didn't designate routes at all.

Q. Didn't you ask for permission to operate in certain areas?

A. Territories.

Q. How did you set that up?

A. Well, the number of territories and states in which I had been operating, prior to the "grandfather" rates.

Q. Well, did you specify any route?

A. No.

Q. How did you reserve for yourself the right to operate, we will say, from Buffalo to Baltimore?

A. I asked for the state.

Q. You just asked for the right to operate in Pennsylvania?

A. Through the state.

Q. On any highways?

A. Any highways, territories.

GEORGE S. THOMPSON, sworn.

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Thompson?

A. I live in Detroit, Michigan.

Q. What is your business?

A. Safety supervisor.

Q. By whom are you engaged?

A. By six companies.

Q. How long have you been in that work?

A. About twenty-six years.

Q. What are your actual duties?

A. My actual duties are to set up the personnel, principally among the drivers; investigate accidents, organize safety education, inspection of vehicles, pass upon all equipment as to the safety of its operation including tires and brakes and all the other ac-

cessories, conduct safety programs and otherwise operate for the efficiency of the organization, and through elimination of accidents.

Q. Now, what were your experience and duties before going with these six companies?

A. Well, being a mechanical engineer, I was in the manufacturing and investigation and laboratory fields. Then I went with the insurance companies as the supervising engineer in charge of investigations in all casualty business. I handled compensation risks and large liability property damage, boilers, engines, machinery and what-have-you.

Q. Did you say how long you have been with the present companies?

A. Four years—three years directly—or indirectly, an insurance contract, and one year directly with these companies.

Q. Now, what is the business of the companies?

A. Transporting of automobiles.

Q. Is that all they do?

A. Well, they drive, a few, and one company is a freight company handling freight exclusively, and also handling a few automobiles when they can advantageously carry them.

Q. That company has some equipment by which it can carry automobiles?

A. Their equipment is merely a flat, broken-open top, with a special device inside of it for carrying one or two automobiles.

Q. Now, have you made up an exhibit showing the accident frequency per one hundred thousand miles for any of these carriers?

A. Yes, I have. I have made it up for the six companies who are engaged in the transporting business, as a whole.

Q. Did you take, for an example, the carrier with the car farthest over the cab?

A. Well, this covers where the car is entirely carried on the truck over the cab.

(A paper was produced and marked Plaintiff's Exhibit No. 5.)

Q. I show you a paper marked Plaintiff's Exhibit No. 5 and ask you if that is the compilation to which you refer.

A. Yes, it is.

Q. Now, do you say that, insofar as Exhibit 5 is concerned, it covers only transport with the cars practically all or all over the cab?

A. Yes, sir.

Q. Will you explain what the letters are in the first column?

A. The letter in the first column is a key for the name of the corporation which operates this fleet and which operates those vehicles.

Q. Now, I think the exhibit is self-explanatory except possibly the last column. Will you tell us what that means?

A. The total column?

Q. The rate column, the last column?

A. This check indicates 196 accidents with 7,767,800 miles. Did I say 196 accidents?

Q. Yes.

A. I wish to correct that. 196 vehicles with 73 accidents, showing a frequency rate per 100,000 miles of travel of .94.

Q. Well, now, then, the last column shows the frequency rate for each company?

A. No, it does not. It shows what the average would be over the group, or, in other words, what the average would be for the numbers of miles

traveled as a whole, and the number of accidents as a whole.

Q. Are you referring to the .94 figure?

A. Yes.

Q. But I mean the whole last column?

A. Oh, the last column? In the last column it shows the frequency rate of that particular company, each company operating independently alone and by itself, with no interlocking of other companies. "A" would show sixteen accidents, traveling 1,100,000 miles with a rate of 1.45; "B" would show sixteen accidents with 1,320,000 miles of travel showing a frequency rate of 1.21; "C" doesn't have any equipment that would be used and in which the vehicle is entirely over the cab, hence there is an omission in that fleet. "D" shows 832,000 miles, four accidents, with a frequency of .48; "E" shows thirty-two accidents in 3,658,000 miles of travel showing a frequency rate of .88; "F", five accidents with 640,000 miles of travel with a frequency rate of .78.

Q. Mr. Thompson, do any of those companies operate almost entirely outside of Pennsylvania?

A. Oh, yes.

Q. Will you state which and in what states they operate?

A. Fleet A operates in Michigan, Pennsylvania, Ohio, Indiana, Illinois, Missouri, Iowa and Kansas. Fleet B operates principally in Michigan, Ohio, Indiana, Illinois and occasionally in Missouri.

Q. Would you say none or practically none at all in Pennsylvania?

A. Very little, if any. They would have very little if any coming into Pennsylvania. Fleet D will operate in Pennsylvania, West Virginia, Ohio, In-

diana, Illinois, Missouri, occasionally Iowa; that is all for that fleet. E operates in Pennsylvania, Ohio, Illinois, Michigan, of course, West Virginia, have permits in South Carolina, North Carolina and in Iowa.

Q. Now, what about "F"?

A. F's business is principally Missouri and Illinois.

Q. Does it ever, or at least with any frequency at all, come into Pennsylvania?

A. No, F would not come into Pennsylvania at all.

Q. Now, you are giving us accident frequency. How did you get the reports on your accidents?

A. Well, we have a rather elaborate report. We obtain that report, first, through education. We use the standard National Safety Council vehicular form, which is very complete, fits our business perfectly, and in which it doesn't give the driver much of an opportunity to sidestep an accident. If and when he reports, and most of our men are pretty fine fellows and if they do have an accident they know they are not going to be shot at sunrise or something of that kind, and the result is that they come in an honestly declare, "I scratched a fender," I had a ditched car," or, if he has an accident of more moment, he will come in and honestly declare it, and then we analyse that accident. It may be his fault and it may not be his fault, as the case may be, and after the analysis is made, then it is taken before a board of his own fellows and they establish entirely his responsibility or someone else's responsibility, but our problem is how to instruct the men to avoid the accident, how could the accident be avoided; that is our big job and we en-

deavor by every means possible to show the man the error of his ways rather than to condemn him to be discharged or thrown out or something of that kind.

Q. Do you have reason to think that you get reports of practically all of the accidents that occur?

A. Well, of course, I wouldn't want to have my life hanging in the balance on it, but I would say this, that I can safely say that 99.2% will be reported.

Q. Now, will you tell us whether, in this Exhibit No. 5, you have listed all that are reported?

A. Absolutely, we list everything if it is nothing more or less than a scratched fender or even if he bumps another car and there is no damage entailed, that is in that report.

(A paper was produced and marked Plaintiff's Exhibit No. 6.)

Q. I show you paper marked Plaintiff's Exhibit No. 6 and ask you if that is a compilation similar to Exhibit No. 5 except that it covers what you call two deck vehicles?

A. Yes, that is true.

Q. And the same explanation will apply to this exhibit?

A. Absolutely.

Q. Now, will you tell me whether or not any of your companies are members of the National Safety Council?

A. Oh, yes.

Q. Are you familiar with the work of that organization?

A. Yes, I have had membership there myself for eighteen years and have been active in all of

their operations, being a member of offices of various sections, also one of the organizers of the famous Detroit Trust and Safety Council.

Q. Will you tell us very briefly what the National Safety Council is?

A. The National Safety Council is a mutual organization composed of representatives from industries of all types regardless, in which they are more or less a clearing house for the filing of accidents, the meeting of people together through conference methods and in which they have a convention every year in some large city. The last conference was held in Kansas City, at which there were 8700 representatives, and they compiled these accidents and brought them in and put them in a published form for the education of the general public and all those who may be interested in them.

Q. Each member is entitled to a copy of that report?

A. Yes.

Q. Do you have one?

A. I have one.

Q. May I ask you how many classifications the National Safety Council has made for the purpose of reporting accident frequency?

A. For trucks alone?

Q. Yes.

A. Eighteen.

Q. May I ask you, Mr. Thompson, to get for us the accident frequency rate per 100,000 miles for the last classification report of the National Safety Council, being the inter-city trucking classification.

MR. KEITEL: I want to object to this testimony because the figures were not prepared

by the witness. I also want to object to all the other testimony that he has offered for the same reason that we objected to the statistics yesterday that were introduced.

THE COURT: Well, you can ask him. You can cross-examine him to see whether he knows what he is talking about.

MR. KEITEL: We will ask him.

BY MR. McNEES:

Q. Would you give us the report for the last one, being the inter-city trucking classification?

A. Yes, sir. The inter-city trucking includes thirty-two fleets, 1452 vehicles which have traveled 26,042,000 miles; the number of accidents 527, with a frequency rate of 2.02.

(A pamphlet was produced, a page of which was marked Plaintiff's Exhibit No. 7.)

MR. McNEES: May I offer as Plaintiff's Exhibit No. 7 a report of the National Safety Council and ask leave of Court to typewrite copies for submission in the record and to the other side.

THE COURT: Yes.

Q. Now, Mr. Thompson, I only want to ask you, then, for this record about the highest classification. Will you tell us what that is?

A. The highest classification, of course, is newspaper delivery. Their index shows a frequency rate of 6.46.

Q. And all of the other classifications come in between those two you have mentioned?

A. The industry as a whole—that is, taking industry as a whole—shows an average factor of 3.44,

covering 18,358 accidents, with a travel of 533,629,000 miles and covering 40,517 vehicles.

Q. Now, did you say that the accident frequency, according to your records, for the car over the cab carrier is .94?

A. Yes, sir.

Q. And that for the two deck carriers is 1.61?

A. Yes.

Q. Now, it is true, isn't it, that the two deck carriers are newer equipment?

A. It is.

Q. And that you have to have experience with them?

A. Yes, and it is true the states have contributed particularly to the accident frequency by inaugurating laws and rules governing the size of the vehicle which makes it a problem rather difficult for a new driver regardless of his age and experience to entirely change his perspectus. Most of these men have some peculiar point on a vehicle that they use to guide them like, for instance, some will use the filler cap, and they will keep that as a line, and others will use the side of the vehicle and the side of the radiator lined with something on the pavement. They will keep them in line all the time, and when you get a vehicle that has no front on it, like, for instance, our stub noses, the boys go out on the pavement and they have to entirely readjust themselves to the conditions, and in that period they are bound to have a few accidents.

Q. Mr. Thompson, do you know in your experience of any accident which was chargeable to the carrying of a car over the cab?

A. Oh, no, no—absolutely no.

Q. Do you know of any accident chargeable to

carrying a car partly over the cab?

A. No—no, I do not.

Q. Do you know of any accident where the damage was increased or any damage inflicted at all by reason of the car being over the cab, which would not have, in your judgment, occurred if the car would have been carried behind the cab?

A. No, that could not particularly contribute, because of the fact that it is actually a part of the vehicle itself. They tie it right down, and the structure is a part of the chassis and it is all reinforced, and the vehicle is tied down on top, and there might be some times when we would be just as well pleased if they were not tied down quite so tight.

Q. Well, will you tell us which type of truck your companies operate or do they have more than one type?

A. Oh, they have about everything. You see, we have, all told, about four hundred and some odd vehicles, and, naturally, the evolution of the industry would be such that you would have some of almost every type.

Q. Will you tell us how the operation of your companies compares with others as to size?

A. They are comparative.

Q. What is it?

A. They are very comparative; they compare very favorably in size, although, as a group, as a whole, it is, I presume, of the largest in the field today.

Q. Well, do you happen to know anything about the number of cars carried into and out of Pennsylvania?

A. I can't give you that today, I haven't it. I can obtain it, but I don't have it with me today.

Q. You don't have the total number of cars carried, do you?

A. No, I couldn't tell you that.

Cross Examination

BY MR. KEITEL:

Q. Mr. Thompson, for what period are those figures that you prepared?

A. Eight months this year.

Q. What months?

A. Beginning January first and ending with the first of September.

Q. For what period are the National Safety Council figures?

A. The period is from July, 1935, to June, 1936.

Q. Does the National Safety Council prepare any figures for the business of hauling automobiles?

A. Nothing, only that they have included that in the inter-city trucking classification.

Q. Does your company pay the drivers a bonus if they never have accidents?

A. Yes; that is, we don't pay bonuses. Our idea is not to pay a man a premium for doing a job that he has already been paid for, but we do give him awards of merit, in money, uniforms, extensions of vacations, and what-have-you.

Q. Isn't it possible that rather than forego those awards of merit the driver might pay for the damage and not report it?

A. Well, no, because he makes an affidavit, as, for instance, we have awarded 186 American Trucking Association buttons for one year or more, without an accident of any kind, and the set-up of the accidents there is under this formula: you

must have an accident of no kind, be engaged in none, regardless of who is at fault or what is at fault, and consequently those boys will not stultify themselves for a badge or a button to that extent, or a bonus or a cap or uniform, or what-have-you.

Q. Do you attempt to select your men?

A. Yes, indeed, we hand-pick them.

Q. Do you give them a course of instruction in safety?

A. Yes.

Q. Do you know whether that is the common practice among other concerns?

A. It is the general practice in most of the concerns today.

Q. Is it the practice in the concerns included within the National Safety Council report?

A. Oh, yes.

Q. All of them?

A. Well, don't ask me to hang myself because I can't report for all others, but I will say that it is the intent and purpose of—

Q. The ones that you know of.

A. All that I know of, to the best of my knowledge and belief, yes.

Q. Then you don't say that your drivers are no better than drivers of any other company?

A. Oh, yes, I do. I say we have got the best men in the world.

Q. Now, in this chart that you have prepared, where you visited a number of accidents, do you have any idea as to—no, first of all, do those include accidents for which you claim your men were not at fault?

A. Oh, yes, it includes all.

Q. Do you have any idea how many of those

accidents were caused by human factor and how many by mechanical failings?

A. Well, I can't tell in this particular chart, but we go to rather extreme details. Perhaps that may seem a little extreme.

Q. Well, I am just interested in this chart.

A. For instance, I may give you this picture—

Q. You can't pick it out in this chart?

A. I can't; not a particular case, no.

Q. You have listed on this Exhibit 6, fleets A, B, C, D, E and F. Would you mind telling us what those companies are?

MR. McNEES: If the Court please, we wouldn't mind disclosing the names of the companies so that Mr. Keitel will know they are responsible. We would much prefer, if we can do it, not to identify them with the particular statistics as A, B and C. Would it be satisfactory to let us know who they are so that the particular statistics—

MR. KEITEL: If it please the Court, I don't think we can accept those figures as reliable unless they can be tied in with certain companies. We have no way to check the accuracy of those companies. Unless it is confidential information, we have no objection to keeping it among ourselves, but I think it ought to be in the record.

THE COURT: If it is Mr. Keitel's plan to check into those companies, then I think he is entitled to it, but I thought that was merely a matter of record.

MR. McNEES: We don't want to conceal anything about it. Possibly we could disclose to

Mr. Keitel and the Court, would that be satisfactory?

(Discussion off the record.)

MR. McNEES: If the Court please, Mr. Keitel and I have come to this agreement, if it is satisfactory to the Court; that we submit the identification of the letters on Exhibits 5 and 6 to the Court, and that they may be of use to the Commonwealth, but that the question as to whether they shall be made a public record shall remain open for the time being. Mr. Keitel may not urge it, and we may not stand on our objection as we get on with the case.

THE COURT: Very well.

BY MR. KEITEL:

Q. Mr. Thompson, what percentage of the figures that you have prepared represents accidents in Pennsylvania?

A. I can't tell you that.

Q. Do you know what percentage of the National Safety Council figures represent accidents in Pennsylvania?

A. I can't tell you that, either, although they are segregated by states for the accidents as a whole, but not to an industry by states.

Q. What would you consider an accident chargeable to the vehicle over the cab? What type of an accident?

A. Well, any type of accident in which the vehicle was involved and in which the car contributed to it.

Q. Well, for example?

A. Well, for instance, supposing that car should strike another vehicle and the car over the cab became dislodged, then I would say that the cause of

the additional extent of the injury done would be caused by the additional injury that that car might do in the creation of killing, death or personal injury or property damage; that is obvious.

Q. Any other type?

A. I don't know of anything of any particular moment.

Q. So that when you say that none of these accidents involved the car over the cab, you mean that none of those accidents were of the type that that car over the cab became dislodged and contributed to the accident?

A. Or that the car itself was the cause of the particular catastrophy.

Q. How else could the car have contributed to the accident?

A. I don't know of any way it could except the additional weight to the vehicle that would naturally create more destruction at the time of the impact.

Q. Did your accidents include injuries to the cars that are being hauled?

A. Oh, no; that is, cargo.

LYNN M. FRANCIS, sworn.

Direct Examination

BY MR. McNEES:

Q. Mr. Francis, where do you live?

A. Birmingham, Michigan.

Q. What is your business?

A. Engineer.

Q. With what company?

A. Mechanical Handling System.

Q. What is the business of that company?

A. We build conveyors and trailers.

Q. I show you Plaintiff's Exhibits 3A, 3B, 3C, 3D, 3E, 3F and 3G, and ask you if those pages are prepared and put out by your company?

A. Yes, they are.

Q. Do they indicate the principal types of car carriers on the market today?

A. They do.

Q. Are there other companies making car carriers in addition to yours?

A. Yes.

Q. Is it true that your company and one other make by far the most of these carriers?

A. We do, yes, sir.

Q. Now, does the other company make a carrier similar to those on these exhibits?

A. Very similar.

Q. And may I ask you if the models which are before the Court were made in your plant?

A. They were.

Q. Will you tell us, in the order in which they are on the stand, to which exhibit they relate?

A. The front one relates to Exhibit 3C.

MR. McNEES: May we ask if we may call the front truck on the stand Exhibit 3C²?

Q. Will you tell us about the second truck, Mr. Francis, to which exhibit it relates?

A. No, I can't tell what your exhibit number is here; it is marked No. 3—

MR. McNEES: 3B².

Q. And the third?

A. Well, the third one would correspond to either 3E or 3D. There is some little change in the appearance.

MR. McNEES: May we call that Exhibit 3DE².

THE COURT: Now, which one do you refer to?

THE WITNESS: It's the third one.

THE COURT: Well, then, the second one there, that is all one, is it?

MR. McNEES: The second one is 3B², hooked up without any cars on it.

Q. Now, Mr. Francis, we will refer to those models for a little bit, if you will. Is it correct that 3C² carries the automobile over the cab?

A. Well, mostly over the cab, not entirely.

Q. And what about 3B²?

A. That's the second one?

Q. Yes.

A. That carries the car horizontal, directly over the cab.

Q. And 3DE²?

A. That has a portion of the rear end of the car projecting from the trailer over the cab.

Q. Now in 3C², where is the weight of the car? Is it on the tractor?

A. The weight of the one car is on the tractor.

Q. And on 3B², where is the weight?

A. You mean of the car over the cab?

Q. Yes.

A. That is on the tractor.

Q. And is there any other weight on the tractor?

A. Yes, there is a second car on the tractor, and some weight on the trailer.

Q. In 3B², then, the weight of the two cars is carried on the tractor?

A. That's right.

Q. And two cars on the trailer?

A. That's right.

Q. In 3DE², is the weight of any car carried directly on the tractor?

A. Not directly, no.

Q. The weight on the tractor comes by reason of carrying the front end of the trailer on which the cars are loaded?

A. That's right.

Q. In all of these exhibits, there is at least a part of a car over the cab, is that correct?

A. Yes.

Q. Now, you have a plan marked Plaintiff's Exhibit E and one marked Plaintiff's Exhibit F. Will you explain the difference in those? They look much alike.

A. Well, these two outfits are essentially the same except for the running gear of the trailer. In the one case, the E has what is called a dual wheel axle, in which there are two tires side by side on each truck. The other one has what we call a tandem axle, which has two wheels, one ahead of the other, on each side. Now, outside of that, the general construction of the trailer is the same.

Q. Now, what about the tractors?

A. We use the same tractor in either case.

Q. In the exhibits, you have one tractor with the cab over the motor?

A. Oh, I beg your pardon. Yes, this one picture shows the tractor with the cab over the motor.

Q. In which exhibit is that?

A. That is F.

Q. Now, will you tell us whether or not the weight of the four automobiles is carried in the same way on both of those exhibits? It is all car-

ried on the trailer in both cases?

A. All carried on the trailer.

Q. And the front end of the trailer resting on the rear of the tractor?

A. That's right.

Q. Now, will you tell us whether or not, in those cases, a part of the one car is over the cab, or in just one case?

A. Well, in general, where we use a cab over the motor, the bumper of the top car does not project over the cab.

Q. Now, when that cab is moved front over the motor, does that in any way change the safety factor? Is it more safe or less safe than with the cab back of the motor?

A. It is my opinion that those trucks are not as safe, because they are a shorter wheel base, and there is more weight carried on the front axle. They seem to be a little harder to handle on the highway.

Q. Do you know whether the driver has as good vision with the cab back of the motor as he does with the cab over the motor, as far as the roadway ahead of him is concerned?

A. I would say there would be very little difference in vision. With the cab over the motor, he might be able to see the road a little closer over the front of his truck, but with the cab over the motor in many cases he is also sitting very much over to one side, which I think is not the best position for driving.

Q. Now, there is testimony that some of the drivers use a point on the radiator or on the front of the tractor more or less as a guide. Is that possible with the cab over the motor?

A. Well, I should say that he would have some

way of guiding himself, except that he would probably have to pick something from the rear of the outfit instead of the front, because there is very little ahead of him.

Q. Now, is the weight carried approximately the same in those two examples, where a part of the car is over the cab and where a part of the car is not over the cab?

A. No, in general, where we use a tractor with a standard type of cab,—that is, where the car on the trailer would project over the cab,—the weight from the trailer is carried a comparatively short distance ahead of the rear axle of the truck, or the tractor. Now, in the case of the cab over the motor, the weight from the trailer is carried farther ahead of the axle, considerably farther.

Q. Does your company pay any attention to safety when it is designing and building equipment of this sort?

A. Well, I would say that is the first thing we consider when we design an outfit.

Q. Have you gone carefully into the safety factor in all your construction work?

A. Yes.

Q. Now, your company does not operate any trucks?

A. No, except for our own use around the plant.

BY THE COURT:

Q. What is the length over all of those?

A. Those are all forty feet, including the tractor and the trailer.

BY MR. McNEES:

Q. If it were a matter of choice, would you say that the longer wheel base tractor would be safer to operate on the highway or less safe than the

short wheel base with the cab over the motor?

A. Well, it is my impression that the tractors built with the cab over the motor that we have to use are too short; that is, the wheel base is a little too short to be right.

Q. Now, will you tell us with reference to Exhibit 3C², when loaded approximately what the centre of gravity is up and down? I mean by just referring to the model, now, if you will, by picking out a point on it.

A. Well, I can't pick out a point by looking at it, but I would say it will be in the neighborhood of four and a half feet from the ground.

Q. Now, will you tell us approximately what part of the total height that is, what proportion?

A. In that case, it is about thirty-five per cent. of the height—thirty-five to forty per cent. of the height.

Q. Have you prepared any exhibits in the form of blue prints which will show the exact centre of gravity?

A. Not on that particular outfit.

Q. On which, if any, of those models over on the shelf have you done that?

A. I think we have the second one.

Q. That is, you think you have the blue print for 3B²?

(A blue print was produced and marked Plaintiff's Exhibit No. 8.)

Q. Mr. Francis, perhaps we can get at what I have in mind better if I show you a blue print marked Plaintiff's Exhibit No. 8 and ask you what that exhibit is.

A. Well, that shows a front view of one of those outfits showing the front of the tractor and the

car on top.

Q. And does it show what you call the tipping angle?

A. Yes, it is drawn at an angle beyond which point it would tend to tip over from the centre of gravity standpoint.

Q. Mr. Francis, the equipment shown on this exhibit is of what type?

A. That is what we call the RT, which is the 3B.

Q. It is similar to that shown on Exhibit 3B?

A. Yes.

Q. Now, was it loaded with cars, in your calculations?

A. Yes, it was.

Q. This carries a car over the cab?

A. That's right.

Q. Mr. Francis, in the truck shown in the exhibit, is the front of the car carrier and also the front of the car carried over the cab?

A. That's right.

Q. Now, will you tell us what other exhibits you have that might inform the Court as to either centre of gravity or tipping angle of the equipment we have been discussing?

A. I have a blue print here on what we call the LT model, which would correspond to Exhibit 3F.

Q. Now, that is also a model which carries a car over the cab?

A. Yes, that's right.

Q. And the blue print shows the front of the carrier and the front of the car carried over the cab?

A. Well, that should show the rear of that car. This should be the rear of the car up here (indicating); the figures would undoubtedly be right.

BY THE COURT:

Q. How could you put a car on top of the cab in either of those exhibits?

A. Well, it hangs out from the front of the trailer over the cab.

Q. That is safe?

A. Oh, yes, perfectly safe. That is all supported by the trailer itself. It stops here (indicating) so it can't roll off.

(The blue print referred to by the witness was marked Plaintiff's Exhibit No. 9.)

BY MR. McNEES:

Q. I show you the blue print which has now been marked Plaintiff's Exhibit No. 9. and ask you, briefly, what that shows.

A. It shows a trailer and tractor which we call Model LT, which corresponds to our Exhibit 3F, with a load of cars and drawn at the angle at which it would be liable to tip.

Q. And what is the angle, if you know?

A. It is thirty-eight degrees and five minutes from the vertical.

BY THE COURT:

Q. Will the Court know what that means when I get it up to my chambers?

A. Well, this is drawn at the angle—you see we show our center of gravity directly over the supporting point here, which is beyond that which would tend to tip over. Now, in getting to that point, we move thirty-eight degrees and five minutes from the vertical.

(A blue print was produced and marked Plaintiff's Exhibit No. 10.)

BY MR. McNEES:

Q. I show you a blue print marked Plaintiff's

Exhibit No. 10 and ask you if that also shows a tipping angle of certain equipment.

A. This particular drawing was made to use in Kentucky where we have an outfit which carries one car over the cab, similar to our first exhibit there, and two on the trailer, and this shows the tipping angle of the truck part of this outfit alone, without the trailer. Now, that shows that we move thirty-five degrees four minutes from the vertical. Now, these other lines which show on here represent the centre of gravity of the different parts that go to make up this complete assembly. That is, we have one which would show the center of gravity of the truck itself, another one which would show the center of gravity of the car on top, and probably another one showing the center of gravity of the supporting steelwork, and altogether they figure up to this point for the combined center of gravity.

MR. McNEES: Indicating a point marked "centre of gravity".

(Discussion off the record.)

(A blue print was produced and marked Plaintiff's Exhibit No. 11.)

Q. I show you blue print marked Plaintiff's Exhibit No. 11 and ask you if you will explain that to the Court.

A. This shows the side elevation of the so-called Kentucky outfit, which has three cars, two on the trailer and one over the cab of the truck. This is the truck here (indicating). Now, it also shows a point on the car and on the truck, which approximates the centre of gravity of each one of the units, and those centres of gravity, using the weight of each unit and the height from the ground and com-

bining them, give us the combined centre of gravity of the outfit.

BY THE COURT:

Q. What do you mean by that word "combined"?

A. Combined vertical gravity, vertical centre of gravity.

(A blue print was produced and marked Plaintiff's Exhibit No. 12.)

Q. Now, I show you Plaintiff's Exhibit No. 12 and ask you to explain what that exhibit shows.

A. Well, this one was made up to show the comparative height of the centre of gravity on what we took as an average weight body, or a cargo body. That is, we wanted to get a comparison between a cargo body and one of those automobile haulers, and this shows the results with the cargo body.

Q. Now, what results does it show? Do you have any figures on the exhibit?

A. Well, it was tipped thirty-four degrees thirty minutes from the vertical.

Q. Now, I ask you, Mr. Francis, if Exhibit No. 12 is scaled one foot to the inch, if you can tell us, by the use of a scale, how high the centre of gravity of that truck loaded is from the surface of the roadway when the truck is down level as it should be?

A. Well, it is almost exactly five feet from the ground.

(A blue print was produced and marked Plaintiff's Exhibit No. 13.)

Q. Exhibit No. 13 is a blue print not very clear, but showing what?

A. This shows a side view of the same cargo

body.

Q. Does that exhibit show the vertical centre of gravity?

A. Yes, 5.1 feet.

THE COURT: Which, the body or the load?

THE WITNESS: Well, that is the combined centre of gravity. That is the centre of the body, and that is the centre of the truck itself without the body, and that is centred, body and load, at that point and combining those we arrive at this point, which is the centre of gravity for the whole outfit loaded. Now, in this, also, I would call attention to the size of the body which is noted here, which I think can be considered an average size of cargo body.

BY MR. McNEES:

Q. Is that indicated on the exhibit by figures?

A. That is indicated on the exhibit.

Q. Were all of these blue prints prepared by you or under your direction?

A. They were.

Q. Are they prepared from pencil sketches or drawings?

A. These blue prints are made from tracings, what we call tracings, which are made with pencil.

Q. And were you responsible for the original tracings—that is, the figures and dimensions that went on them?

A. I was.

Q. I understand that the trucks which are shown on Exhibit 13 and Exhibit 12 are loaded trucks?

A. Yes, that would be a loaded body.

MR. McNEES: We offer, if the Court please, Exhibits Nos. 8 to 13, inclusive, in evidence.

MR. KEITEL: We object to the offering of these in evidence until the qualifications of this witness have been established.

THE COURT: Well, the proper time to establish that would have been immediately after he went on the witness stand. Why didn't you ask the purpose of the witness and then examine him as to qualifications? We will let you examine him now, but it is out of order.

MR. KEITEL: We just now learned that the witness prepared these drawings, your Honor.

Cross Examination

BY MR. KEITEL:

Q. What basis did you use for the preparation of those sketches? How did you calculate the centre of gravity?

A. Well, on some details, of course, you can figure—on the cargo body, which is a rectangular body, you can determine very closely where that centre would be.

Q. How did you do that?

A. Well, if you take—say you have a cube, and you want to get the centre of gravity with the cube, I think engineering principles would tell you it is the centre, up and down. Now, we follow the same rulings on a rectangular body.

Q. That would take care of the body. How about the wheels?

A. The centre of gravity of the trucks and cars, we consulted some of the makers of these vehicles

and got the best opinion we could from them on the height from the ground, and in what position lengthwise this point would be.

Q. Did you calculate that yourself?

A. I know I got some of that information myself.

Q. Well, now, how did you get it? Just take these last two exhibits, this rectangular truck, how did you sit down and figure out the centre of gravity? What mathematical method did you use?

A. Well, now, to start with, we have a rectangular body, 12 feet long, 5 feet 6 high, 7 feet 6 wide. Now, if that is loaded uniformly, we know the centre, lengthwise, will be in the centre of the body, don't we?

Q. If the body is detached from the wheels, yes.

A. Considering the body alone.

Q. Yes.

A. Now we also know that the centre of that mass will be one half the height of the body and, of course, crosswise, it will be halfway across. Now, on this particular chassis that we used we found that the approximate centre of gravity of that chassis would be two and three-quarters feet from the ground.

Q. How did you find that?

A. This was done some time ago, but, as I say, we—

Q. Did you do it?

A. Some of those figures I got myself. I can't tell you which ones now, but I say I got the best opinion we could get from the makers of these vehicles.

Q. You didn't calculate all these figures, then, on this print?

A. No.

Q. Did you calculate all the figures on all the prints?

A. No. They were done under my direction.

MR. KEITEL: We object to these blue prints, your Honor, because this witness just admitted that he did not prepare all the figures.

THE COURT: It was done under his direction.

MR. KEITEL: He has not testified as to what formulas or methods were used.

THE WITNESS: That is what I started out to do. Now, we arrived at the centre of gravity of the body in itself, the centre of gravity of the tractor in itself. The weight of this tractor was apparently 3,000 pounds, and we took the weight of the body and load as 8,000 pounds.

Q. Well, now, I want to know—

THE COURT: Let him finish.

MR. KEITEL: Well, he said, "we arrived at the centre of gravity" of the tractor or truck—

THE COURT: If he did that himself, he had engineers, I suppose, working under him.

MR. KEITEL: Well, it is important to us to find out how he arrived at that.

THE WITNESS: Well, I have explained that we got that from the makers of those vehicles.

BY THE COURT:

Q. What system of mathematics did you use? Algebra, geometry, trigonometry, or calculus?

A. Well, this is plain arithmetic.

Q. Well, what principles of science apply to this centre of gravity?

A. Well, the principle—

Q. Did you use chemistry or physics?

A. Well, the principle that applies to the centre of gravity is that, if you move the centre of gravity of any object outside of its base, it is just liable to tip over.

Q. Yes, that is true, but what is your law governing the centre of gravity? How do you compute it? What is your formula?

A. Well, I don't think any formula is concerned in this. If the maker of the vehicle tells us that the centre of gravity is approximately a certain point in height and length of that vehicle, they do spend some time in determining what the centre of gravity is, I know that.

Q. But you have no prepared figures on the centre of gravity?

A. Of the vehicles we are concerned with, which are these trucks and trailers combined.

Q. Well, you did not calculate the centre of gravity here shown on this print, Plaintiff's Exhibit 13?

A. Which centre of gravity?

Q. The centre of gravity there in the cab.

A. No, I didn't calculate that figure.

MR. KEITEL: Then we object to Exhibit 13 on that basis, your Honor.

THE COURT: Well, I will have to judge of the weight of the testimony when I come to consider it. We will receive it subject to your objection.

Q. Do you know what formula was used on the calculation of the centre of gravity of these other

exhibits, involving your own equipment?

A. Well, now, what do you mean by formula?

Q. I mean the various weights and lengths and distances that you add together or subtract, multiply or divide, to reach this figure, this conclusion that you have made.

A. Yes.

Q. Well, what is that formula?

A. Let me have one of them. (Plaintiff's Exhibit No. 11 was handed to the witness.)

THE COURT: Now, tell us how it is made.

A. Well, to start out, we have the centre of gravity which we have established as nearly as we could for each unit of this—

Q. Well, now, how do you establish that?

A. The automobiles, as I say, we obtained the figure from the manufacturer, and I think it is about thirty inches from the ground in each case, and this tractor, again, is two feet nine inches from the ground. Now, we take the weight of the car and multiply it by the distance of that weight, from the ground—

Q. You mean the total weight of the car?

A. The total weight of the car; and then, in this case, we have two cars over each other, which is practically a vertical load, combine the two figures and divide by the weight, will give you the height of the centre of gravity of the two cars, combined, from the ground.

THE COURT: Of what institution are you a graduate?

A. Syracuse University.

Q. As a mechanical or—

A. A mechanical engineer, yes.

THE COURT: Mr. Keitel was going to do

that, but I thought he overlooked it.

MR. McNEES: I think I should have done it when I first put the witness on.

MR. KEITEL: Well, we continue our objection to these exhibits.

THE COURT: We receive them subject to your objection.

Redirect Examination

BY MR. McNEES:

Q. Mr. Francis, I neglected to ask you what your position is with the company with whom you are engaged?

A. I am development engineer.

Q. Have you developed the equipment that we have been referring to?

A. Most of it, yes, sir.

Q. Are there any patents on this equipment, if you know?

A. There are certain patents on certain details of this equipment, yes.

Q. Do you know whether there are any design patents?

A. Design patents?

Q. Yes.

A. Not on any of the models. We have one design patent on a certain motor.

Q. How long have you been with the company?

A. Since the fall of 1929.

Q. Did you have any financial interest in it?

A. Somewhat, yes.

Q. Now, will you tell us whether or not, in your department and all other departments of the com-

pany, you have undertaken to build the safest equipment you can build?

A. Yes, we certainly have.

Q. And in the present development of the science, does the equipment you are now building represent the safest which you can find?

A. We have tried to build into that the safest details we could.

Recross Examination

BY MR. KEITEL:

Q. Mr. Francis, is the type of vehicle shown on Plaintiff's Exhibit No. 11 used in Pennsylvania?

A. Well, it would not be built to be used in Pennsylvania; it might be used.

Q. I believe at the outset of your testimony you stated that your concern and one other manufactured the majority of those carriers, is that correct?

A. That is correct.

Q. What is that other company?

A. Whitehead and Kales.

Q. I also believe that you testified that the types shown in Exhibits 3 represent substantially all the different types of equipment that are being manufactured?

A. Well, they represent the principal types that are under consideration here.

Q. Are you familiar with the types that Whitehead and Kales build?

A. Well, you will find they are very similar.

(A paper was produced and marked Defendant's Exhibit "C".)

Q. I show you a paper marked for identification

Defendant's Exhibit "C", and ask you whether they represent the various types manufactured by Whitehead and Kales, or a type represented by Whitehead and Kales?

A. Well, I am not in position to say. Apparently, it is their literature. I don't remember seeing that particular trailer.

Q. You are not familiar, then, with this type?

A. Not with that particular one.

Q. Now, referring again to Plaintiff's Exhibit 3D and this figure here (referring to Model 3DE²), could that bumper be removed from the foremost car on the upper deck so that it would not stick over the cab?

A. I would say, in most cases, it could not. If you refer to Exhibit 3D, you will see a car with the bumper apparently removed, which still projects over the cab.

Q. Would the same thing be true of Exhibit 3E?

A. Yes, that is essentially the same outfit, as far as dimensions are concerned.

Q. Could you remove the bumper of the car foremost on the upper deck there?

A. The result would be practically the same. The dimensions of that outfit are essentially the same as the dimensions of 3D.

Q. How much would protrude over the cab with the bumper off?

A. I would say about eighteen inches, possibly two feet.

Q. I believe you gave your opinion as to the safety of the type where the cab is over the motor as compared with the type where the cab is back of the motor. On what do you base that opinion?

A. Well, I base it on reports that I get from

the operation of these things; that is, things which are told me about how they handle them on the highway.

Q. Have you had any experience yourself with these various types of equipment?

A. Not in driving them, no.

Q. What special studies have you made of safety problems involving this type of equipment?

A. Well, our first aim in designing a vehicle is, of course, to build something that will not break and let the load down. That is the first thing we worry about. Now, as far as the height of the centre of gravity, that has to conform somewhat to the type of vehicle that we can build to conform to a certain law.

Q. You mean by "law", a state law?

A. A state restriction. Now, beyond that, we take these outfits and our present practice is to build up on them and load it up probably with much more load than it ever will be asked to carry, and put it out on the highway and run it, try to break it, try to find out the weak points.

Q. Well, have you done that with all these various types on these trial runs?

A. No, I wouldn't say we have on all of them.

Q. What other studies do you make toward the safety of them?

A. Well, for one thing, we attempt to use material which we know is satisfactory. In some cases, we use alloy steel in order to get a sufficient strength to satisfy us, while for accessories that we don't make ourselves we try to buy the best we can.

Q. Do you know what the strength of that steel is?

A. Of which steel?

Q. The steel that you make.

A. We don't make any steel.

Q. Well, the steel that you use.

A. We take the maker's specifications. We have to, unless we want to set up rather an elaborate testing laboratory and that is general practice on steel, to accept the manufacturer's rating as to tensile strength.

Q. What is the tensile strength, do you know?

A. That depends on the type of steel we use.

Q. Well, what different types do you use?

A. Well, the ordinary structural steel, probably the tensile strength would run 60,000 pounds. Now, we can get alloy steel that runs 100,000 pounds. We can get as high as 200,000 pounds per square inch.

Q. What type of steel do you use on these types?

A. We use partially standard structural steel and partially alloy steel, which have I believe a tensile strength of about 100,000 pounds per square inch.

Q. What type do you use in the supports and the runway over the cab?

A. That is ordinarily standard structural sheet.

Q. That is, the 60,000 pounds?

A. That's right.

Q. For both the supports and the runway?

A. Ordinarily, I would say yes; that is, per square inch.

Q. Now, I show you Plaintiff's Exhibit 3G and ask you whether, on any of that equipment, the fifth wheel is ahead of the rear axle of the truck tractor?

A. Model C, Model B, Model DL, Model LT, Model F.

Q. Is there any engineering objection to having

the fifth wheel in front of the rear axle; anything that makes for unsound construction?

A. Not on certain types of vehicles.

Q. Well, as a general rule?

A. No, I would say, in general, that was all right.

Q. Now, the types of your equipment in which the fifth wheel is behind the rear axle of the truck tractor, could they be altered so as to place it in front of the rear axle?

A. I would say they could not and make a satisfactory outfit out of it.

Q. Well, what would be unsatisfactory about them?

A. What are you referring to now? Which ones?

Q. Well, you pick the one—any one.

A. Well, in Exhibit 3C. The way that is constructed at present, there is just room for the tractor wheels to turn under the front end of the trailer, and if it would attempt to move the fifth wheel up from its present position, which as I recall is about four feet back of the axle, it would be necessary to leave the front end of the trailer very high in the air.

Q. About how high?

A. Two to three feet higher than it is now, I would say.

THE COURT: How would you get through underpasses, then?

MR. KEITEL: They wouldn't have the car on top, your Honor, under those circumstances.

THE WITNESS: Well, you have the car on the trailer, though, which would go up higher.

BY MR. KEITEL:

Q. It wouldn't go higher than the one that is now on the cab, would it?

A. I think it would.

Q. If you raised it how far?

A. Two to three feet.

BY THE COURT:

Q. What is the usual height of these car underpasses? About twelve feet?

A. Well, that varies. There are quite a lot of them on the older highways, some of which run ten, eleven, twelve feet. There is no uniformity to it except on the regular highways.

Q. Referring to Model 3C, you say that it would be difficult to move the fifth wheel ahead of the rear axle?

A. That's right.

Q. It wouldn't be satisfactory? Why couldn't that unit be reconstructed in accordance with the method used as to Model T or Model TT on Exhibit 3G?

A. Well, Model TT and Model T both have the car over the cab.

Q. Yes, and if the car over the cab were removed, why couldn't your model in Exhibit 3C be reconstructed in accordance with the trailer principles there?

A. Well, because both of those trailers are so arranged that the car is carried very low down in the trailer. In other words, the lower car sits between the wheels of the trailer. In this case, those cars have to travel over the wheel of the trailer.

Q. Why couldn't you have a trailer built on the same principle as Model T or Model TT with the third car to the rear of that?

A. You mean another car back here (indicating)?

Q. Yes.

A. Well, I couldn't answer that without going into it. You would be over forty feet long with that kind of an outfit.

Q. Well, is there anything in Pennsylvania to prevent you from being over forty feet long?

A. No, but in interstate commerce we can't be over forty feet long and go anywhere.

Q. Is that a ruling of the Interstate Commerce Commission?

A. That is dependent upon the state highway laws.

Q. What is the longest equipment that you manufacture today?

A. Practically nothing we make any more is over forty feet long.

Q. What is the longest equipment of yours that is in use today?

A. Well, that is hard for me to say. I know that there is some equipment used in New York which runs somewhat over forty feet, but I don't recall building anything over forty feet long for a long time.

Q. Now, you are referring to Exhibit 3C. How long is the over-all length of that model?

A. I believe it is about forty-five feet, as I recall.

Q. Well, you look at the exhibit.

A. The specification says 'over all about fifty feet.

Q. Would there be anything to prevent the use of that model in Pennsylvania, so far as length is concerned?

A. No, I believe that length is allowed in Penn-

sylvania. I am not positive about that.

Q. I want to refer you again to these exhibits 3 and ask you the comparative dates when you started building this type of equipment. Start at "A" and go right on down, please.

A. Type "A", the general type was started in 1933.

Q. Do you continue that today? Do you still manufacture that?

A. Very few—very few of them today.

Q. How many in the last year?

A. I can't tell you that. I wouldn't think it would be—well, I can't tell you. Maybe a dozen; not very many unless there are some more that I don't recall right now. I know it is very few.

Q. How about 3B?

A. Well, that is the same type of trailer, only it is a later model, with improved top, new loading conditions, but it is the same type as 3A.

Q. When did you start making that, and do you still make it?

A. Well, that would be the model we would make now on order, with the arrangement shown here of the top. I believe it was about two years ago that we got that particular model out.

Q. What percentage of your recent sales were of that model, would you say? Just approximately.

A. Well, I don't think it would run one per cent., offhand.

Q. All right, how about Exhibit 3C?

A. The general type of 3C, I believe, was started in 1932.

Q. Is that being made today?

A. We haven't manufactured any in two or three years.

Q. How about Exhibit 3D?

A. That is the type that was built about two years ago—two to three years ago—two to two and a half years ago.

Q. Do you still manufacture those?

A. Not with this particular construction, no. It is the same type of vehicle as we are making now; that is, same type as 3E but it is a different construction of framework.

Q. Well, how about 3E? When did you start making those?

A. 3E and 3F are both the same general type of trailer, and were started about a year and a half ago.

Q. Is the majority of your output today of those two types?

A. It is, yes.

Q. Which type would you say you sell the most of?

A. Well, I think of late, it's been 3E, but previous to that we sold a great many of 3F.

Q. Now, Mr. Francis, could any of this equipment be operated with a full load except for the car over the cab?

A. Well, the first and foremost one of our models would be entirely unbalanced if we took the car off the cab.

Q. Could it be operated at all at any speed?

A. I would say no. Oh, probably you could drive it around, but from the safety standpoint it would not be safe at all to operate it.

Q. Well, would it be safe at five miles an hour?

A. Well, I don't know; I don't think so.

Q. Well, now, why wouldn't it be safe?

A. Because you have the load so far back of the rear axle that there is a tendency of lifting the front wheels off the ground, and the minute you begin to

relieve the load on the front wheels of your truck or tractor, then you lose your steering ability, you can't control the vehicle.

Q. How much of an up pull is exerted on a normal load on the front wheels in that Model 3C?

A. You mean with the car off the top of the cab?

Q. Yes, with the car off the top of the cab.

A. Well, I would say it would run a thousand—fifteen hundred pounds.

Q. What are those pounds? What do they represent?

A. That is, pounds taken off the load which is on your front axle. In other words, the front end of the tractor might weigh 2000 pounds. Now, if you take off 1500 pounds, you have 500 pounds left on the ground to hold you down.

Q. Well, now, if you take that car from over the cab, there would be an up pull exerted by the weight of the cars on the trailer?

A. Yes.

Q. Now, how much of an up pull would that be?

A. Well, that is what I say, I think, roughly, it would be a thousand to 1500 pounds.

Q. Pull up this way (indicating)?

A. That is, pressing down on the back and lifting up very much on the front.

Q. Well, would the up pull on the front be equal to the down push on the back?

A. No, there is a different lever there. That is, you have the lever with the fulcrum over the rear wheels of your truck. Now, the front of this trailer is hung, as I recall, about four feet back of the axle, and you have a regulation of the lever arms there of four feet in the rear and about twelve feet in the front. Depending upon the wheel base of the truck and the load on the front of that trailer, I

would say roughly would run up about 7000 pounds —or 6000, something like that.

Q. The load on the fifth wheel?

A. That is, the load on the fifth wheel.

Q. And you have allowed for that in saying that there is an up pull of a thousand pounds, approximately, on the front?

A. Well, you have a ratio of the lever arms there of about one to three and, of course, if you take a 6000-pound load with a ratio of one to three, that would make a 2000-pound load.

Q. Now, if the fifth wheel were right at the rear axle, would there be an up pull?

A. Only what you would get from the pulling of the trailer; that is, the tendency to tip up the truck as you pull on the vehicle behind it.

THE COURT: Purely a question of the law of physics, isn't it?

THE WITNESS: Yes.

Q. Well, now of the amount of weight of the car over the cab, how much is necessary to counteract that uplift?

A. Well, from this photograph on Exhibit 3C, the weight of the car over the cab on that vehicle is approximately evenly distributed between the front and rear axle of the truck.

Q. So that you would have half of the weight on the truck?

A. Half of the weight of that car on the front axle.

Q. If it were a 3000-pound car, would you get 1500 pounds weight on the front axle?

A. Yes, sir.

Q. You have been speaking, now, of that exhibit when it is loaded with three cars on the trailer. What would be the effect if you take a car off the trailer?

A. Well, if you took that rear car off, there would be practically no effect because that car is almost entirely carried by the rear axle of the trailer.

Q. It wouldn't make any difference that the front of the rear car is to the front of the axle of the trailer?

A. Well, the fact is that the centre of gravity of that rear car is so close to the point over the axle of the trailer, that there would be very little effect on the front end of the trailer in moving the car.

Q. Do you manufacture the tractors?

A. No, we do not.

Q. Do you guarantee them to your purchasers in any way?

A. Not the tractors themselves.

Q. They don't buy them from you?

A. They don't buy them from us. They bring them to our plant and we attach the trailer to them.

Q. You build the framework, however, on which the car over the cab rests?

A. We do.

Q. In the construction of this framework of these runways, have you made any allowance for the vibration factor?

A. Well, I don't know exactly what you mean by allowance. There is certain experience that you gain in building this stuff which can't be very well put in rules, but you gradually learn certain ways you can make such structures which will stand up, and certain other ways which probably won't, and we follow a great deal our own experience in putting together any particular detail to attempt to keep it from vibrating afterward.

Q. Do you insulate the runways against vibration?

A. No.

BY THE COURT:

Q. Does the vibration tend to freeze the material in the trailer?

A. That does happen sometimes. Maybe a crack will develop in the steel.

Redirect Examination

BY MR. McNEES:

Q. Mr. Francis, the question has been raised as to whether or not you might take the bumper off the front car on the Model 3DE² so it would comply with the law. If you do that, would it any way affect the safety of transportation, merely taking the bumper off the car?

A. Well, I don't think it would have any effect one way or the other. If the car was hanging over the deck cab, it would still be there. That is, the tail of those cars sticks out.

Q. If the car was only over the cab to the extent of the bumper, and the bumper was taken off, and thus make the load comply with the present law, would that increase the safety factor in any degree at all?

A. I can't see that it would make any difference at all.

PERCIVAL STUBBS THORNTON, sworn.

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Thornton?

A. Berwyn.

Q. What is your business?

A. Automobiles, Dodge and Plymouth dealer in Philadelphia.

Q. A dealer, covering what territory?

A. Well, we have part of Philadelphia County, part of Berks, part of Montgomery, a small part of Delaware.

Q. What cars do you handle?

A. Dodge and Plymouth.

Q. How do you get these delivered to you?

A. They are delivered to us by M. and G. convoy from Detroit in the wintertime and from Buffalo when the Great Lakes are open.

Q. Do you get any by rail at all?

A. Once in a while the factory will ship us a carload or two by rail.

Q. Which is the better service for your company, by rail or by truck?

A. By truck.

Q. Why?

A. Well, they bring them right into our place of business and place them on the floor. It is more convenient, in the first place.

BY THE COURT:

Q. Do the railroads do that now, too?

A. No, sir, railroads will not bring them in, in any service that I know of. We have to make arrangements to have them unloaded by a separate organization.

Q. When the car is shipped to Philadelphia by rail, is there any gasoline in it?

A. No, sir.

Q. Are the batteries connected?

A. No, sir.

Q. Are the batteries in the car?

A. I can't answer that question. It's been so long

that I have seen a car shipped by rail that I am not sure.

Q. Well, if it is shipped that way, you must at least connect the battery and put gasoline in, and then will you tell about getting the car to your place of business? Do you drive over the streets?

A. Well, there are various ways you can do it. Many years ago, we used to have a regular crew that we sent down to unload the cars out of the freight cars, and then we would have a little truck with gas on it and oil and water, and fill the cars up there and drive them to our place of business.

Q. Now, in driving them to your place of business, what about insurance?

A. We used to carry insurance from the time the cars were unloaded on the car platform. We had a blanket policy covering that.

Q. Now, when they come in by truck, is it necessary to carry property and public liability insurance until you are ready to move the car?

A. No, sir, not until they are in our building.

Q. Is it correct to say that practically all the cars you receive move into this state from another state?

A. Yes, practically all, because they come from the Dodge and Plymouth factories. We get an occasional car from another dealer in exchange, or something like that, but a very small number.

Q. Now, there is testimony here to the effect that it would be impractical to bring these cars in except on carriers where they are over the cab. If the car carrier service must stop for any reason, would that affect your business?

A. It would increase our costs.

Q. How could you get them in? Would you have

to go back to rail?

A. There would be two ways of getting them in, either driving them all the way in, which you have a hard time getting the factory to approve, or else ship them in by rail.

Q. Do you have difficulty with customers where cars are driven in?

A. We have never even considered driving cars in on account of the customer objecting to cars being run that way.

Q. There are cars moved in that way?

A. As I understand. Every day I see a number of trucks. I haven't seen many passenger cars.

Cross Examination

BY MR. KEITEL:

Q. You have seen these trucks that haul automobiles on the highway, have you?

A. Yes, sir.

Q. Have you ever seen trucks that are designed to haul only three cars?

A. Yes, I have seen some with three cars on them.

Q. If a three-car hauler brought your cars to you, would your business be harmed?

A. I don't quite understand.

Q. Well, if the cars came in, instead of coming in on a truck that hauls four, if they came in on a truck that hauls three, would your business be hurt by that?

A. Not if they charged the same rate, no.

Q. If they came in on a truck that didn't have a car over the cab, would that hurt your business?

A. No.

Q. What objection would your customers have to a car that is towed in?

A. Why, a great many would feel that they are getting a car that had too much wear on the tires, that trucks had too much wear on the tires when they got them.

Q. You make your contract with the M. and G. Company, don't you?

A. What do you mean by a contract?

Q. You make arrangements with M. and G. to bring you the cars?

A. That's right.

Redirect Examination

BY MR. McNEES:

Q. And you pay for the freight?

A. I pay for the freight.

Q. Do you remember whether the three-car outfits had a car over the cab or not?

A. I can't remember. It seems to me that some of the older trailers just had a place for three cars. I don't remember seeing a three-car outfit for some time.

Q. Do you remember whether the car carriers that come into your place of business have cars over the cab now?

A. Yes, I can answer that; I have seen them.

Recross Examination

BY MR. KEITEL:

Q. Do you drive your demonstrators in from the factory?

A. No, sir.

Q. They are hauled in, in the same way?
A. All hauled in.

HENRY WILLIG, sworn.

Direct Examination

BY MR. McNEES:

Q. Will you tell us where you live?
A. Baltimore.
Q. With what company are you connected?
A. General Motors, Incorporated.
Q. What does that company do?
A. Sell Dodge and Plymouth cars.
Q. Retail sales?
A. Retail and wholesale.
Q. What territory does your company cover?
A. We cover a great portion of Maryland only.
Q. Did you hear the testimony of Mr. Thornton?
A. I did.
Q. Would your testimony be the same with respect to how you get your cars and the general effect on your business of stopping that service?
A. It would be the same.
Q. And you pay the freight, too?
A. Yes, sir.

(No cross-examination)

JOSEPH R. TREW, sworn.

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Trew?
A. Washington, D. C.

Q. And what is your business?

A. We are distributors for Dodge and Plymouth in the Washington area.

Q. Covering any area outside of Washington City?

A. Yes, about six counties in adjacent Virginia and six counties in nearby Maryland.

Q. Did you hear the testimony of Mr. Thornton?

A. I did.

Q. Would you tell us whether, in response to the same questions, your answers would be substantially the same?

A. It would be exactly the same, and with permission I would like to elaborate upon their answers. I took the time to come up here today because this does affect our business very vitally. The tractor-trailer method of bringing cars into Washington has been very beneficial from our standpoint. It is quicker, about fifty per cent, quicker than rail shipment, which frequently is a very vital factor in our business. In the second place, it is more efficient for the reason that Mr. Thornton mentioned, namely, that the cost of sending after cars, to be unloaded at a freight station, and the cost of bringing them back to our service department and the cost of going through certain assembly operations in our service department, which doesn't have to be done where cars are brought in by trailer completely assembled. All of these various items are more economical. In other words, it performs a service for our business which saves us and saves everyone involved a great deal of time and money and work.

Cross Examination

BY MR. KEITEL:

Q. Do you have competitors in your area?

A. Oh, yes.

Q. If they couldn't get their cars by this method, would they have any advantage over you?

A. They might, because if some of our competitors were unable to receive cars in the same fashion we are receiving at present, it is conceivable that they might tow their automobiles through or to employ someone to tow their automobiles through, and that is a thing which Dodge, Ford and Plymouth, neither company, would not consent to.

Q. I am talking about competitors in your line of automobiles. Do you have competitors in your makes?

A. Well, we have no direct competitors in Dodge. You see we are selling those at wholesale and retail. The various Dodge dealers are part of our family, so to speak, in this territory.

Q. Doesn't the net price to the purchaser include the cost of transportation?

A. It does.

Q. So that if your transportation costs were increased, it would really be added on to the price you charge your customers?

A. Yes, and that would be an added cost to the public.

MR. McNEES: If the Court please, I wonder if we may understand that the cars of all these dealers move through Pennsylvania? I neglected to ask it, and it will save time if we agree to that.

MR. KEITEL: I suppose that is true.

MR. McNEES: Are there any other dealers in the room?

(No response.)

C. M. BOUTELL, sworn

Direct Examination

BY MR. McNEES:

Q. Mr. Boutell, where do you live?

A. Birmingham, Michigan.

Q. In what business are you engaged?

A. Automobile transportation by truck.

Q. How long have you been in that business?

A. Eight and a half years.

Q. Were you employed by your father or uncle before you became active yourself in it?

A. By my father.

Q. How long a time?

A. About four years.

Q. Are you an intervener in this case?

A. I am.

Q. Under what names do you now operate?

A. F. J. Boutell Driveaway Company and Central States Transit Lines.

Q. Are both of those companies incorporated?

A. Just the F. J. Boutell Driveaway.

Q. Do both of them operate in carrying automobiles in Pennsylvania?

A. They do.

Q. Either from some other state to Pennsylvania or through Pennsylvania to another state?

A. That's right.

Q. Is all of your business in Pennsylvania in-

terstate? I mean moving between some states.

A. Yes, it is.

Q. Do you operate the type of equipment which has been shown generally in Exhibits 3A, B, C, D, E, F and G?

A. I will have to take a look at the exhibits.

Q. Maybe I can shorten it by asking this: Do you operate the type of equipment which has been testified to here yesterday and today?

A. Yes, sir.

Q. And represented by Models $3C^2$, $3B^2$ and $3DE^2$?

A. I don't use any of the first type there.

Q. You don't use any $3C^2$?

A. No.

Q. You do use $3B^2$?

A. Yes.

Q. And how about the last ($3DE^2$)?

A. That also.

Q. Now, in that $3B^2$ motor which you operate, are there two cars on the tractor?

A. $3B^2$ is your center one there? Yes, there are two cars on the tractor.

Q. And two on the trailer?

A. Yes, sir.

Q. And on the $3DE^2$ type, all of the cars are on the trailer?

A. Yes.

Q. Now, is all of the one car, or part of the one car over the cab in every case?

A. Yes.

Q. Even on the $3DE^2$?

A. Yes.

Q. How little of the car is over the cab, in some instances, in the last type?

A. Well, the bumper and the exhaust pipe and possibly a small portion of the body, the long flowing trunks, and so forth, extend over the cab.

(Four photographs were produced and marked respectively Plaintiff's Exhibits Nos. 14, 15, 16 and 17.)

Q. Now, I show you a picture marked Plaintiff's Exhibit No. 16, and one marked Plaintiff's Exhibit No. 17 and ask you if those are all pictures of that equipment?

A. Yes, they are.

Q. All of them with the exception of Exhibit 16 show car carriers loaded?

A. Yes.

Q. Now, may we clear the record? Except Exhibit 16 and Exhibit 14, do those show car carriers loaded?

A. Yes.

Q. And do they show the respective position of the car over the cab in Exhibit 17 and a car partly over the cab in Exhibit 15?

A. Yes.

Q. Mr. Boutell, are you a responsible financial owner in the Central States Lines?

A. I am.

Q. And sole owner in the Boutell Company?

A. No.

Q. Do you have responsible financial interest in that?

A. Yes.

Q. Have you been responsible for the selection of equipment which you want to operate?

A. I have.

Q. Tell us whether, in your own judgment, you have selected the safest equipment you could get.

A. We always endeavor to do that, yes.

Q. Do you have any accident records that you keep in your office?

A. We do, yes.

Q. Will you tell us, without reference to any particular exhibits, whether you know of any accidents in all of your service caused by reason of a car being carried over the cab?

A. I do not.

Q. Can you tell us of any accident occasioned by reason of part of the car being over the cab?

A. No.

Q. Can you tell us whether, so far as you know, any damage caused by an accident was increased by reason of the fact that a car had been carried partly or entirely over the cab?

A. I know of none, no.

(A paper was produced and marked Plaintiff's Exhibit No. 18.)

Q. I show you Plaintiff's Exhibit No. 18 and ask you if you will explain briefly what that is, particularly with reference to matters which might not be entirely clear by reading them.

A. Generally, this exhibit represents the accident experience of F. J. Boutell Driveaway Company.

Q. Does it cover your experience in all states?

A. Yes.

Q. Do you have any figures segregated for Pennsylvania?

A. Yes.

(at 12:20 o'clock p. m., adjourned until 2:00 o'clock p. m.)

(At 2:00 o'clock p. m., court reopened.)

C. M. BOUTELL on the stand

BY MR. McNEES:

Q. Mr. Boutell, referring to Exhibit 18 which we did not explain much this morning, I do want to ask you if it shows the number of accidents in Pennsylvania as compared with the number involving a car over the cab equipment?

A. Yes, it does.

Q. What are those figures?

A. The number of accidents in the Commonwealth of Pennsylvania were 28; accidents involving car over cab equipment were 5.

Q. Now, what is that percentage?

A. That percentage is 17.8%.

Q. That is 17.8% of the accidents in Pennsylvania occurred to equipment carrying a car over the cab?

A. Right.

Q. Now, do you have figured the ratio of car over cab equipment to other equipment operated in Pennsylvania?

A. The number of car over cab equipment operated in relation to the total units of equipment is 27.87%.

Q. Is it correct, then, to say that while 27.87% of your equipment operated is of the type which carries a car over the cab, only 17.8% of accidents involve that type of equipment?

A. That's right.

Q. Have you a statement similar to Exhibit 18 covering the Central States Transit Lines?

A. Yes, we have.

(A paper was produced and marked Plaintiff's Exhibit No. 19.)

Q. I show you exhibit marked Plaintiff's Ex-

hibit No. 19.

MR. KEITEL: At this point, your Honor, we would like to renew our objection to these statistics.

THE COURT: We will make the same ruling.

Q. Does Exhibit No. 19 show with relation to the Central States Transit Lines practically the same information as Exhibif No. 18?

A. Yes, sir.

Q. Mr. Boutell, have you followed and do you now obey all safety rules and regulations of the Interstate Commerce Commission?

A. Yes.

Q. Have you filed an application with that Commission for authority to render your service?

A. We have.

Q. You were rendering service before June 1st, 1935?

A. Yes.

Q. Therefore, I want to ask you if you filed your application under what we call the "grandfather" clause?

A. We did.

Q. Did that application cover the service which you are now rendering in Pennsylvania?

A. Yes, it did.

Q. Do you have prepared any exhibits showing the number of cars which the Central States Transit Lines have carried in the past year and the number in Pennsylvania and the number of dealers served?

A. Yes, we do.

(A paper was produced and marked Plaintiff's Exhibit No. 20.)

Q. I show you paper marked Plaintiff's Exhibit

No. 20 and ask you if that statement is the one to which you refer.

A. It is.

Q. Will you tell us whether the 112 dealers served in Pennsylvania are more or less centralized in one locality or not?

A. They are scattered all over the entire state.

(A paper was produced and marked Plaintiff's Exhibit No. 21.)

Q. Have you prepared a similar exhibit which has now been marked as Plaintiff's Exhibit No. 21, covering the F. J. Boutell Driveaway Company?

A. We have, yes.

Q. Now, are the 320 Pennsylvania dealers which you serve under that company located in any particular section of Pennsylvania?

A. No, they are scattered throughout the entire state.

Q. Will you tell us whether or not you render any service which involves going through Pennsylvania to another state?

A. We do, yes. We go through Pennsylvania into New York State, Maryland, Delaware, New Jersey, Rhode Island, and the District of Columbia.

Q. Is that business any important part of your total business?

A. A very definite part, yes.

Q. You carry insurance, I presume?

A. Yes.

Q. Both property and public liability?

A. Yes.

Q. What about cargo insurance in this kind of service?

A. We also carry cargo insurance.

Q. Does that mean that the value of the cars car-

ried is insured by you until it reaches destination?

A. Yes, it is.

Q. Do you know something of the total volume of business which both these companies together have done in the past year measured by gross receipts?

A. I would say approximately about a million and a quarter.

Q. Did you tell us whether all of that business or practically all of it is in interstate commerce?

A. The biggest percentage of that is in interstate commerce. I would say offhand that about eighty-five or ninety per cent. of it would be interstate.

Q. Are you the responsible operator for both of those companies?

A. I am, yes.

Q. Now, together, is that operation large in the industry, or is it down the list pretty well?

A. It is considered large in the industry.

Q. Probably among the first two or three or four?

A. I would say about that, yes.

Q. If the car carriers which have a part of the car or all of the car over the cab are ruled off the highway in Pennsylvania, what would be the effect on your business?

A. Well, if that were to take place, it would completely close up the business.

Q. Well, it would leave your intrastate business, whatever that is, wouldn't it?

A. Well, whatever of our business was intrastate, that wouldn't carry the business.

Q. What is your principal place of business? Where do you keep your trucks?

A. The main office is in Flint.

Q. And do you keep most of your equipment there?

A. Yes.

Q. Will you tell us of any incident in your experience as an operator where the car over the cab either caused an accident or prevented one?

A. I know of no such occasion; I never heard of one.

Q. Have you made any effort, since the Pennsylvania law was enacted, to change over your equipment so that the car now carried over the cab could be left off?

A. No, we have not made any effort to change the equipment. However, we have considered and made quite a study of just how we could eliminate that car over the cab if it were at all possible to do it, and we have definitely concluded that you can't possibly take the four-car equipment where you are carrying the one car over the cab and eliminate that piece of equipment.

Q. You can carry it with one car eliminated on the rear end of the trailer?

A. Yes.

Cross Examination

BY MR. KEITEL:

Q. Mr. Boutell, are you engaged in the driveaway business also?

A. Yes, we do some driveaway business, also.

Q. What percentage of your total business is that?

A. I am not qualified to say what percentage it is, but a good estimate would be that it is less than one per cent.

Q. What make of car do you haul?

A. We handle General Motors products and Chrysler products and a few other manufacturers, also.

Q. What arrangements are made for the payment of freight?

A. Payment of freight, in the case of everything but the General Motors operators, is paid to us directly by the dealer. In the case of General Motors business, it is paid to us indirectly by the dealer.

Q. Well, how is that accomplished?

A. The factory pays us and charges the dealer's account.

Q. You stated that, to your knowledge, there has been no accident caused by the car over the cab?

A. None.

Q. What kind of an accident would you have in mind as being caused by the car over the cab?

A. I can't conceive of any type of an accident whereby the car over the cab would be the direct cause of that accident. When you consider the magnitude of this industry and the millions of miles that these various operators have traveled, no one of them has as yet ever had an accident that involved the car over the cab, or where that car over the cab was the direct cause of the accident. I could not personally conceive of a condition whereby that would happen.

Q. Now, I think you also testified that you do some intrastate commerce?

A. Yes, we do.

Q. Let me ask you this: If that intrastate commerce were in Pennsylvania, and you also had interstate commerce in Pennsylvania, would the effect

of the law be any different on your interstate commerce than on your intrastate commerce?

A. I think I will have to have that question over again.

Q. If you had both types of business in Pennsylvania, interstate and intrastate,—you know what I mean by intrastate?

A. Yes.

Q. —and this law that is here being contested were made effective, would it affect your equipment in interstate commerce any differently from your equipment in intrastate commerce?

A. If we had business in Pennsylvania as an interstate commerce carrier and as an intrastate carrier, and, if this same law were in effect on interstate business and it affected the intrastate business in the same manner—now, what was the last part of your question?

Q. Would your equipment be affected the same that is used in both types of business?

A. Yes.

Q. Now, on these exhibits that you have prepared, Exhibit 18 for the F. J. Boutell Driveaway Company, and Exhibit 19 for Central States Transit Lines, do these accounts of yours include these haulers when they are empty?

A. It includes them both empty and loaded, yes.

Q. In your application to the Interstate Commerce Commission for the territory in Pennsylvania, did you claim for yourself—

A. The state.

Q. The entire state?

A. Yes.

Q. All roads and highways? Did you ask for a separate classification for your various types of

business?

A. Just what do you mean by that?

Q. Well, now you are in the driveaway business and the haulaway business?

A. Yes.

Q. Did you ask for separate classifications in your application?

A. Do you mean did we file separate applications?

Q. No, in your application, did you ask for separate classification for the particular types of business?

A. In our driveaway application we ask for the driveaway business, but included under the Act—

Q. How many applications did you file?

A. Two.

Q. One for the driveaway business, and one for the trucking business?

Q. Do you recall making a statement in your application that the question of regulation in the driveaway business from a safety standpoint is wholly dissimilar from that of truck driveaway operation?

A. That the question of safety was wholly dissimilar—?

(The question was read to the witness by the official stenographer.)

A. No, I don't recall making that statement.

Q. Just so we get the record straight on this, I am calling to your attention what purports to be a copy of your application. Is that your signature?

A. Yes.

Q. Now, I call your attention to Statement No. 1—

A. Statement No. 1?

Q. Exhibit A, Statement No. 1, Paragraph C.

A. Paragraph C?

MR. McNEES: If the Court, please, we believe that this is irrelevant. Maybe a statement of the purpose will help to clear it up. It has no reference to car over the cab, as far as we can tell.

THE COURT: What is the purpose, Mr. Keitel?

MR. KEITEL: The purpose is to show that this litigant here, this intervener who is in the place of a plaintiff, has admitted that there is a different safety question involved with reference to driving a truckful of automobiles than there is when they just drive a truck, which some of these driveaway operations consist of, and we think that that admission on the part of the litigant is admissible as an admission, and is relevant because it says that they themselves believe that an ordinary truck is different from a truckful of automobiles, from the safety standpoint.

THE COURT: That is, it is safer or less safe?

MR. KEITEL: Well, the only inference, I believe, that can be drawn is that the truckful of automobiles is less safe. He certainly has not contended that it is more safe.

MR. McNEES: Well, if the Court please, in the first place, that is only an inference; in the second place, most of the driveaway business, as I understood it, is of passenger cars and not trucks, which would not be comparable in any way with the driving of trucks, and the state-

ment proposed to be put into the record does not say which is the safer. It just says there is a difference. We don't think it would be competent in this case as proving anything.

THE COURT: I will hear it, subject to your objection.

BY MR. KEITEL:

Q. Have you ever engaged in the driveaway business of trucks?

A. We do a small amount of that, yes, a very small amount of it.

Q. Now, I refer you again to that paragraph and ask you whether you now recall including that statement in your application, that there is a difference from a safety standpoint between driveaway operations and truckaway operations.

A. Will you read that question again, please?

(The question was read to the witness by the official stenographer.)

A. Yes, I recall including that statement, but as to the difference, the scope of it is so broad here that the inference that we intended certainly did not have any reflection on the present issue.

Q. On this suit, you mean?

A. Yes.

Q. Well, do you think there is a difference?

A. There is a difference in safety?

Q. Yes, in regulation, from a safety standpoint.

A. Yes, there is a difference. In the driveaway operation, you have got a lot more men to regulate. You have got more men, your control would be a little more and remote. In other words, we have got—Let's say, for example, you have four cars on one truck, you have one man to supervise. When you have those four cars on the road, you have four

cars and four men to supervise.

Q. Well, do you think there is any difference as far as the Interstate Commerce Commission is concerned?

A. I am not familiar with just how much concerned the Interstate Commerce is on this issue.

Q. Do you think there is any difference from the standpoint of state regulations? I believe that is what the paragraph referred to.

A. I am not familiar with any state that has regulations, or that regulates the driveaway operation.

Q. Well, do you think there is any difference in the problem of regulation by states from a safety standpoint?

MR. McNEES: Perhaps the witness understands, but I don't. Any difference between what?

MR. KEITEL: Between the problem from a safety standpoint in state regulation of driveaway and truckaway businesses.

A. I can see one factor where it might have. States are generally interested in the problem of congestion, and drive away certainly congests the highways more than the trucks. Other than that, offhand, I can't think of anything else.

Q. There is no other difference in your mind?

A. No.

Q. Do these pictures which you have identified represent all the types of equipment that you have?

A. That we have?

Q. Yes.

A. Well, they don't represent all the types that we have in this respect: Now, we have this type of trailer here (referring to Exhibit No. 15). On Ex-

hibit No. 15, we have the same type of trailer, where the wheels instead of being in tandem are dual, placed one alongside of the other. Otherwise, the pictures do represent—

MR. McNEES: (Handing another picture to the witness): Would that help you?

THE WITNESS: Yes.

BY MR. KEITEL:

Q. How long have you had this type of equipment shown in Exhibit 15?

A. These trucks, I believe, were purchased around 1934.

Q. At that time, did the motors that you carried protrude as far over the cab as the one shown in the photograph?

A. Oh, yes.

Q. The trunk and the extra wheel were there just the same in 1934?

A. Well, I believe that is a 1934 Buick on the truck; I am positive it is.

Q. Is it possible to haul those cars the other way?

A. What other way?

Q. Have this first car on top, have the front of that car facing to the front of the truckaway vehicle? Turn this car around, in other words.

A. I understand what you mean. No, I don't think it is. To begin with, it would give you an improper distribution of weight. In other words, the biggest percentage of the weight of your automobile comes in the first half of the car there.

Q. It would cause the weight, in other words, to be shifted to the front?

A. That's right.

Q. Where do you prefer to have it? In the center?

A. It isn't a question of preference, it is a question of engineering principles. In this type of semi-trailer, the ratio of the weight which is supposed to rest on the rear axle of the truck as compared to the weight that rests on the rear axle of the trailer must maintain a definite consistent ratio, for this reason: that states allow us at certain periods of the year a maximum weight that we can impose upon your pavements. If you were to change that ratio, it would necessitate carrying larger tires on this tractor and larger tires on the trailer, and that is one of the principles that have to be kept in mind at all times in the development of this equipment.

Q. Well, now, did you ever drop off one car at a destination and then go on with three more?

A. That can happen; it isn't a common occurrence.

Q. Well, now, if you dropped one off of this Exhibit 15, which one would you drop off?

A. The chances are you would drop the back car off first.

Q. Would you make any change, then, in the position of the front car?

A. No.

Q. Wouldn't you have the unequal distribution of weight, then, that you have just referred to?

A. No, because that is the point we are concerned with, not back here. Invariably, we can work out our distribution of weight a little better back here on the trailer than we can on the tractor, because we are definitely concerned with height back here, and you can see the back portion of the trailer is considerably lower than the front part of it.

Q. So that the absence of the car on the back of the upper deck would not throw it out of balance like

the absence of a car on the front of the upper deck would, is that correct?

A. That is right, yes.

Q. Now, would there be any objection to taking the front car off the upper deck and driving the back car to within a short distance of the front of the upper runway? In other words, move this back car up to about here (indicating)? Could you operate your equipment safely under those conditions?

A. Why, I can't conceive of any case where we could do that.

Q. Well, could you do it?

A. I am not the person to answer that. I am not a trailer engineer, by any manner of means.

Q. You have just testified about the distribution of weight on those wheels.

A. I gave you what my knowledge was on certain facts.

Q. Well, now, give me your knowledge of what would be safety operation if we would put one car in the centre of this runway and toward the front, and made it a three-car operation. Do you think that would go?

A. Speaking entirely from the standpoint of safety, in the case of this trailer here, you could not anchor that car part way towards the front. It has to definitely rest either in this position (indicating), or that position (indicating).

Q. Why?

A. In the first place, the trailer is built so there are pockets for that car to rest in, with steel stops. There is also a cross-section here that is built to chain to, or tie down to, and the same goes for the back car. There is a lock made here to tie this car down there (indicating) and to tie it down here (in-

dicating), and then there is a safety chain that is put in between the two cars. It is attached from the axle of one to the axle of the other, which is an additional safety feature.

Q. Well, aside from the difficulty in anchoring them, would you have any other objection to operating that way, assuming that the one car on top would be anchored?

A. I would have a lot of objection to operating that trailer as a three-car trailer. It is not economically sound.

Q. Any other reason besides the economic and the anchoring?

A. There are probably lots of other reasons I could get from someone that built the trailer.

Q. Do you know of any other reason?

A. From my own personal knowledge, I don't have any other reason why you couldn't do what you state in your question.

Q. Now, I think you stated that the difference in regulation, from a safety standpoint, of the driveaway and the truckaway consisted in traffic congestion.

A. I stated that that was probably one of the possible points that a state might consider.

Q. Did you have that in mind when you filed your application? Is that the difference you meant in that application?

A. That is one of the differences we probably meant.

Q. What else did you mean?

A. Well, whatever else was inferred by that, I am not in position to tell you; I don't know.

Redirect Examination

BY MR. McNEES:

Q. Mr. Boutell, referring again to Plaintiff's Exhibit No. 15, will you tell us whether or not putting a car in the centre of the trailer on top would raise the total height materially?

A. Oh, definitely.

Q. Can you tell us how much, from the picture?

A. It wouldn't be possible to ascertain the exact amount, but the contour of the top of that trailer and the fact that the rear wheels of each one of those cars is placed in a pocket, it is reasonable to believe that if that same car were moved up to a higher level, it would increase the overall height in the same proportion as the increase in the height of the trailer.

Q. Do you think that might be as much as from six inches to a foot?

A. Very easily.

Q. Now, if the top cars were reversed on the trailer so that the back ends were in the centre and the front in the front, and front in the back, would that also raise the total height because of the top being over the back wheel?

A. Yes.

Q. Will you tell us whether you know this construction well enough to know that you could put a hole or well in the runways back toward the centre of the trailer without interfering with the cars below?

A. No, that would be impossible. They ride too close to the top of that trailer to put a well in at that point.

Q. And will you tell us whether or not one car in the centre of the trailer would place more weight

in front between the axles instead of over the axles where the weight now is carried?

A. Very definitely, yes.

Recross Examination

BY MR. KEITEL:

Q. One car, you say, would add more weight than two cars now, do you?

A. I said that one car placed in the centre of the trailer would increase the weight between the axles.

Q. Over the weight that is now there with the two cars?

A. That's right.

Q. Now, there is one more question. If we had just one car on top and the car was headed towards the front of the vehicle, would it necessarily increase the height?

A. You mean if the car were in what position on top of this exhibit?

Q. Well, if this back car were moved to the front?

A. How far to the front?

Q. How far could you take it to the front without increasing the height?

A. You couldn't move it at all without increasing the height. The minute you tried to move the car forward, the minute you moved it forward you would increase the height six inches.

Q. Increase the height of what?

A. You would increase the height of the car you were moving.

Q. Yes, but would you increase it over the height of the one that is on the front?

A. Oh, yes.

Q. How far could you move it without doing that?

A. I doubt if you could move it at all without doing that.

Q. Well, at the runway, is this point (indicating) any higher than this point (indicating) as compared with the top of the hood and the top of the car?

A. You say this point here (indicating)?

Q. I am talking about the rear one.

A. Yes.

Q. You mean to say that there is sufficiently increased height in the runway to make up for the difference between the altitude of the top of the hood and the top of the automobile?

A. I mean that if you move this car forward even a short distance, you would increase the height of these cars to a greater degree than the height of this one.

Q. How far could you move it without increasing it?

A. I couldn't tell you that without trying it.

Q. How high is that outfit?

A. I don't know exactly what that would measure, the overall height of that outfit.

Q. Do you have wells in all of your equipment to hold the wheels of the car on the top truck?

A. Yes, for the back cars there.

Q. Are all cars on the top truck held by wells, or do you have some that are held by stops?

A. Only the back cars are held by wells, to the best of my knowledge.

Redirect Examination

BY MR. McNEES:

Q. Do you have your cargo on your cars in a similar manner as that described by Mr. Mordan?

A. Yes, we do, identically.

S. H. ALPERT, sworn.

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Alpert?

A. New York City.

Q. What is your business?

A. Underwriter of an insurance company.

Q. With what company are you engaged?

A. Aetna Mutual Indemnity Company of New York.

Q. What is the business of that company?

A. Writes automobile liability and damage insurance on automotive vehicles.

Q. Do you write insurance on trucks carrying freight generally?

A. Yes, sir.

Q. And do you write insurance on what we call car carrier convoys?

A. We do.

Q. What is your particular business with your corporation?

A. I am underwriter.

Q. What does that mean?

A. My job is to set the rates for the various risks, and to select the business which is good and try to throw out as far as possible that which is bad.

Q. That is, if a new type of business came into your office, it would be your job to finally decide the rate to be applied?

A. That's true.

Q. Have you had anything to do with rates on general motor truck freight lines?

A. Yes.

Q. Can you tell us how the rates on car carriers involving those which carry all or part of the car over the cab compared with the rates on general over-the-road freight?

A. Well, basically—that is, beginning with the basic rate, they are about equal, but actually, as it turns out, the autocar convoy of the type you describe does get a better rate.

Q. Now, is that because the rates ultimately are based on experience?

A. That is one reason.

Q. By experience, what do you mean?

A. Well, the ratio of losses incurred during a period of years previous to the time we carried it, to the earned premium—that is, the amount of premium which that particular line is carrying.

Q. Do you know whether you carry insurance on any of the quipment of the parties to this suit?

A. Yes, we do.

Q. Which one?

A. The M. and G. Convoy.

Q. That is, Mr. Mordan's line?

A. Mr. Mordan's line, yes, and we did carry Maurer and Myers for a while. That is about all I can recall.

Q. On the M. and G. Convoy, do you know whether that company's basic rate was below or above the over-the-road freight hauler?

A. I would say it was below.

Q. Now, by experience, was it increased or reduced?

A. To our experience?

Q. Yes.

A. Well, to be truthful, we just have had it for a period of one year.

Q. So you have not changed that rate?

A. We haven't changed that rate, no.

Q. Can you tell what his lowest ratio was for the year?

A. His ratio for the year was 17%. By that we mean the amount of premium earned and the actual losses incurred, without carrying expenses or anythink like that, was 17% of the earned premium.

Q. That is, he paid you 100% of premium and it has cost you 17% on actual outlay of losses?

A. On every premium dollar he has paid us, we have paid seventeen cents to the claimant.

Q. Is that a good or bad record?

A. That would be considered excellent.

Q. Would that be desirable business to the company?

A. It would.

Q. I guess it is safe to say you would be glad to write all of that type of business you could, now?

A. I would be pleased to.

Q. Is there any average loss ratio or any figure which companies consider as generally satisfactory?

A. Well, it would vary from company to company, depending upon their method of operating, but as far as my company is concerned, an average loss ratio of approximately 50% would allow the company to break even.

Q. When you get above 50%, you begin to in-

quire what you can do for the business?

A. That's right, that's when we begin to lose money.

Q. Do you have anything to do yourself with accident reports?

A. Well, not directly, except that anything of an unusual nature is brought to my attention immediately. Naturally, everything that would affect the underwriting end, if the line would develop an unusually gross accident, vehicle or any sort of accident, indicating that the equipment is in poor shape or not properly operated.

Q. Will you tell us whether or not, when the number of accidents of any particular type become noticeable, that is brought to your attention?

A. Yes, sir.

Q. Have accidents involving the transportation of cars, automobiles over the cab, by carriers been brought to your attention by reason of any high loss?

A. No, they have not.

Q. Do you know of any accident at all caused by reason of the fact that the car was carried wholly or partly over the cab?

A. Not to my knowledge has there been any.

Q. Will you tell us whether there is any difference in rates applying to car carriers depending upon whether there is a car carried over the cab or whether there is not?

A. No, there is not, insofar as the autocar carriers are concerned. Our principal objection is to the low flat type of open trailer.

Q. The long type?

A. The long open type, that's right.

Q. You mean by that an equipment that, to carry

four cars, without it being over the cab, would make it so long as to make it objectionable?

A. That would be about the size of it.

Q. Would there be a difference in premium rate?

A. There would. There would be a 50% increase in premium. As a matter of fact, we would prefer not to write that class of business.

Q. Is there equipment of that sort?

A. Well, yes, there seems to be. It seems as if they are disposing of it now as being too unsafe.

Q. Do you happen to know whether that is where they are carrying all four cars, on practically the same level?

A. I believe it is.

Q. You said you were carrying M. and G. for a year. Has it been long enough to have rewritten the risk?

A. Yes, a renewal policy has been issued.

Cross Examination

BY MR. KEITEL:

Q. What states is your company authorized to do business in?

A. Well, we are doing business in eighteen states, principally throughout the East.

Q. These rates that you have spoken about are rates of your own company?

A. That's right.

Q. Not rates of other companies?

A. No, although they have been set up at the beginning, after consulting with the various companies, finding out what their experience has been under different types of business done, developing our own rates.

Q. But it is the rates of your own company generally that you are talking about?

A. Yes.

Q. Do rates like M. and G. include the cargo?

A. No, they do not.

Q. Is there any deductible provision in that insurance?

A. There is.

Q. Now, are the rates for that insurance lower than the rates for similar freight haulers with the deductible clause of the same amount in?

A. I would say there would be.

Q. How much? How much a thousand?

A. Well, I think it would make a difference of at least half per cent. on a thousand.

Q. Half per cent. of the premium?

A. That's right.

Q. Did you state what your premium is on this type of insurance?

A. No, I have not.

Q. What is it?

A. Well, it varies, depending upon whether the risk is cargoed, where it operates to and how far it operates.

Q. What are the low and the high limits?

A. Well, I would say the highest rate we have got for an auto convoy is seven, almost eight per cent. I think it is 7.90 a thousand.

Q. What is the lowest?

A. The lowest we have got is 3½%.

Q. How many of these auto convoy companies do you insure? The total number?

A. Oh, I believe we have about eight.

Q. Why don't you insurance people carry Maurer and Myers anymore?

A. Well, there was a little misunderstanding arose, some question as to whether they were covered in one particular state, and they decided to cancel the coverage.

Q. They cancelled the insurance?

A. Yes.

Q. You would write them again today?

A. As far as I know.

Q. As far as you are concerned, you would write them again?

A. Yes.

Q. You attempt to select your companies, do you?

A. Yes.

Q. Both types, straight haulers and auto haulers?

A. That's right.

Q. Now, how many accidents involving these trucks that haul automobiles have been brought to your attention, we will say in the last year?

A. Well, individual accidents, I would say there have been none. In other words, there have been none of any consequence that attracted attention, that would warrant my attention. What I did have is the individual experience on the line as a whole.

D. F. BURKHARDT, sworn.

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Burkhardt?

A. Cleveland, Ohio.

Q. What is your business?

A. Insurance agent.

Q. Does that mean that you are the local writer or underwriter?

A. That's right.

Q. Do you carry the Mordan insurance?

A. I do.

Q. You wrote it in the company that was represented by Mr. Alpert?

A. That's right.

Q. Could you tell us whether the rate of the second year was any higher or any lower than the first year?

A. We just renewed his coverage for a second year, as of November 2nd, and the rate is slightly lower than it had been the year before.

Q. Will you tell us whether you represent any other insurance company?

A. I do.

Q. Did you hear Mr. Alpert's testimony?

A. I did.

Q. Will you tell us whether or not the other insurance company, so far as it is reflected through your local underwriting, has the same attitude and writes insurance on the same general basis as Mr. Alpert's company?

A. Yes, they do.

Cross Examination

BY MR. KEITEL:

Q. Mr. Burkhardt, is the accident record of M. and G. and Mr. Mordan the sole reason for the reduction of premium?

A. For the rate and the reduction in it is based on his accident experience and loss experience. In other words, his losses have been such that the ac-

count as a whole has been profitable to the company.

Q. Did the purchase of new equipment by Mr. Mordan have anything to do with that?

A. No.

Q. You make no attempt to investigate that phase of his business?

A. We do.

Q. Well, then, it does have something to do with it?

A. Only to the extent if we find some form of equipment that may be in any manner at all defective, we suggest he make arrangements to take care of it.

Q. Well, his accident record being the same if he got what you considered safe equipment, would the premium go down?

A. That's right, it would.

Q. Do you know of any company that at one time wrote this insurance which has discontinued it?

A. Yes, I do.

Q. They are still in business, that company?

A. You mean the company?

Q. Yes.

A. Well, now, let me understand you correctly. Do I understand you to say the insurance company that wrote the business, that they were discontinued?

Q. Yes. That insurance company is still in business?

A. Well, not now, if they discontinued.

Q. They are still in some other kind of insurance business?

A. No.

Q. Do you know of any that is still in business?

A. That wrote truck business?

Q. That wrote auto hauler business?

A. That made a specialty of it?

Q. No, that wrote it as a side line or specialty or any other way, which does not now write it.

A. Yes, there are a number of such companies.

FRANK TIFFENBAUGH, sworn.

Direct Examination

BY MR. McNEES:

Q. Where do you live?

A. Buffalo, New York.

Q. What is your business?

A. I drive a truck, for the J. F. Boutell Drive-away Company.

Q. How long have you been with the company?

A. Since 1932.

Q. Have you been pretty steadily employed?

A. Very much so.

Q. Have you any idea how many miles you have driven in the service?

A. Approximately 300,000.

Q. What type of truck have you been driving, or have you been driving more than one type?

A. Well, I drove two types of truck, one with the type carrying the car over the cab since 1933.

Q. Now, will you tell us whether you have been driving into or through Pennsylvania?

A. Through Pennsylvania and into Pennsylvania.

Q. Have you had any accidents due to the fact that you were carrying all of the car over the cab?

A. No, sir.

Q. Have you had any accident due to the fact that part of the car was carried over the cab?

A. No, sir.

Q. Now, on cars carried over the cab, does the driver sit inside of the steel framework?

A. He does.

Q. From the standpoint solely of the driver, would you tell us whether or not you consider the car over the cab more or less safe than the equipment with the car back of the cab?

A. No, the car over the cab is just as safe.

Q. Now, is your vision as good in that type of equipment as other equipment?

A. I have no trouble seeing at all.

Q. Does it make any difference in your vision of the highway whether you have a car over the cab or have the equipment to carry the car but don't have it on?

A. It doesn't make any difference.

Q. Did you ever try to operate one of these four-car convoys designed to carry a car over the cab, without the car over?

A. I did, sir.

Q. What was the result?

A. The result is that you can't control the steering wheels.

Q. Because the weight on the front wheels is too little?

A. There isn't enough weight on the front wheels.

Q. Have you had any accidents where the damage was increased by reason of the fact that you had a car over the cab?

A. No, sir.

Q. Have you had any accidents in Pennsylvania in which anyone was killed?

A. No, sir.

Q. Have you had any serious accident of any sort in Pennsylvania?

A. No, sir.

Q. Can you tell if there is any difference in the number of accidents per mile that you have in Pennsylvania than in other states, or does it average about the same?

MR. KEITEL: If it please the Court, he testified he has not had any accidents.

THE COURT: In Pennsylvania.

MR. KEITEL: Well, I think it should be established as to other states.

MR. McNEES: We will withdraw the question.

Cross Examination

BY MR. KEITEL:

Q. I shew you Plaintiff's Exhibit No. 14 and ask you whether you ever drove an outfit like that?

A. Like that? Yes.

Q. I believe you testified that your vision is as clear when driving one of those trucks as if the car were not over the cab, is that correct?

A. That is correct. I have no trouble in seeing.

Q. Was it as clear as if the car was not there?

A. Yes.

Q. Do those side supports that hold the runway on the roof, interfere with your vision at all?

A. What do you mean by side supports?

Q. These supporting rods there that hold the runway.

A. These uprights, you mean?

Q. Yes.

A. Well, they don't affect your seeing at all.

Q. Are they flush with the side support of the frame of the cabs?

A. There is clearance between.

Q. So that, instead of the side support of the cab, you also see while driving one of those vehicles, the upright support of the runway on the roof, don't you?

A. You mean this part here (indicating)?

Q. No, the upright.

A. You mean we see that?

Q. Yes.

A. Not necessarily. We don't look directly at it.

THE COURT: You are looking ahead, aren't you?

THE WITNESS: We are, yes, sir.

Q. (By Mr. Keitel) Of course, you look to the side when you come to an intersection?

A. That's right, but you look out your side windows.

Q. But you can see this upright when you look out to the side or diagonally, can't you?

A. You can see it, but it doesn't interfere with seeing an object.

Q. You can see just as well as if it was not there?

A. I believe I do.

Q. Now, the part over the cab, if there is a car loaded on that runway, can you see as well as if that were not there?

A. If there was a car loaded overhead?

Q. Yes.

A. Yes, you can see.

Q. Can you see trees as well?

A. Yes.

Q. It doesn't interfere with your upward vision?

A. No, no.

Q. Can you see red lights as well?

A. I never had no trouble seeing red lights.

Q. Well, can you see them as well as if the car was not there?

A. Yes, I can see all right.

Q. When going down a hill, can you see up the other side as well?

A. Yes, sir.

Q. As if this was not there?

A. I can see up the hill.

Q. You have driven cars of the type with cars over the cab, haven't you?

A. Yes, I have.

LESLIE REESER, sworn.

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Reeser?

A. York Haven, R. D. 1.

Q. What is your business?

A. Transporting automobiles.

Q. You are a brother of one of the other witnesses?

A. Yes, sir.

Q. Are you in business entirely for yourself?

A. Yes, sir.

Q. Is your business much like that of brother's?

A. Yes, sir.

Q. Now, will you tell us whether you have had any experience trying to operate equipment carrying three cars, no part of any of which went over the cab?

A. Yes, I did.

Q. Where did you get the car carrier? Did you make it or buy it?

A. I had it made in Detroit at the Maurer Handling System.

Q. That is the same that was made by these others?

A. It is.

Q. What was your experience with the cab?

A. Bad.

Q. How do you mean "bad"?

A. One freight accident and two other accidents.

Q. Well, how?

A. It had no traction on the front wheels. You go over and tip in the road. The front would rise and you didn't know where it would sit down. It would sit down maybe six inches from where it rose from. It would just run like a snake.

Q. Was that equipment where one car was carried on the rear end of the tractor?

A. One car back of the cab and two cars on the trailer, all three in line.

Q. All carried approximately at the same level?

A. Yes.

Q. All carried on it standing flat?

A. They were all flat.

Q. Do you remember how long that equipment was?

A. It was 53 feet long.

Q. Do you know whether you could operate that now, legally, in Ohio?

A. No, you could not.

Q. Where do you haul cars from?

A. In the summertime, from Buffalo, New York; in winter, from Detroit.

Q. In winter, do you have to go through Ohio

to get into Pennsylvania?

A. I do, but I didn't last winter.

Q. You couldn't use that equipment?

A. Well, no, but we didn't go through Ohio last winter.

Q. Mr. Reeser, will you tell us whether any of the equipment illustrated on Exhibit 3G is much like the three-car equipment you were talking about?

A. Well, that is something similar to it.

(Discussion.)

Q. Well, the answer is, then, to the question that there is nothing on 3G like the equipment you have?

A. No, not that I saw.

Cross Examination

BY MR. KEITEL:

Q. How fast do you have to drive that to make it go like a snake?

A. It don't matter. She will do it at any speed.

Q. Do you do it at ten miles an hour?

A. She would do it any speed, make a tip in the road.

Q. Where was the fifth wheel on your tractor?

A. I would say it was about five feet back of the rear axle.

P. G. DOEFFINGER, sworn.

Direct Examination

BY MR. McNEES:

Q. Where do you live?

A. Pittsburgh.

Q. What is your business?

A. I am representative for Boutell Driveaway Company in Pittsburgh.

Q. Were you with Mr. Boutell when the pictures were taken of trucks on the highway showing some part of the car over the cab?

A. I was.

MR. McNEES: We have a number of groups of pictures taken in different cities. There are in each city maybe from two to four, and we would like to have them marked by number and the different ones by letter, if it is satisfactory to you.

(Six groups of pictures were produced and marked respectively as Plaintiff's Exhibits Nos. 22, 23, 24, 25, 26, and 27.)

Q. I show you exhibits marked Nos. 22, 23, 24, 25, 26 and 27 and ask you if these pictures are all pictures taken either by you or Mr. Boutell, mostly by Mr. Boutell, in your presence?

A. They are.

Q. And were they all taken on the highways in Pennsylvania?

A. They were.

Q. Now, on Exhibit No. 22, do you have three separate pictures?

A. Yes.

MR. McNEES: We ask that they may be identified by the reporter, lettered 22A, 22B and 22C.

(The three pictures comprising the group marked Plaintiff's Exhibit No. 22 were marked respectively 22A, 22B and C.)

Q. Now, will you tell us whether all three of those pictures are of the same truck?

A. They are.

Q. And do they show any part of the body of the truck built over the cab?

A. They do.

Q. Do you know whether this truck carries a Pennsylvania license?

A. Yes.

Q. Now, referring to Exhibit No. 23, is it correct that you have two pictures of the same truck?

A. That is correct?

Q. And is that a Pennsylvania licensed truck, do you know?

A. As far as I can recall, when we took the pictures, there was only one that was not a Pennsylvania licensed truck and it is not that one.

Q. Is this one a truck of a company operating out of Harrisburg?

A. It is.

Q. Does it show any part of the body of the truck built over the cab?

A. It does.

MR. McNEES: We ask that those may be marked Plaintiff's Exhibits Nos. 23A, and 23B.

(The two pictures comprising the group marked Plaintiff's Exhibit No. 23, were marked respectively 23A and 23B.)

Q. As to Exhibit 24, is it correct that you have three pictures covering the same truck?

A. That is correct.

Q. Is this truck the South Carolina truck or the one which was not Pennsylvania licensed?

A. Correct.

Q. That picture was taken in Pennsylvania?

A. It was.

Q. And do these three exhibits show a part of the body of the truck built over the cab?

A. They do.

Q. Did you inspect the cargo at the time on this truck in Exhibit 24?

A. I don't think I did.

Q. Do you know whether any part of it was carried at the time over the cab in the space provided there?

A. No, positively.

MR. McNEES: We ask that these be marked 24A, 24B and 24C.

(The group of three photographs identified as Plaintiff's Exhibit No. 24, were marked respectively 24A, 24B and 24C.)

Q. As to Exhibit No. 25, you have four pictures?

A. That is correct.

Q. Do you know whether this is a Pennsylvania licensed truck?

A. It is.

Q. Do you know what it is designed to carry?

A. It is designed to carry barrels.

Q. And is your body built over the cab?

A. It is.

Q. And is there a place for part of the cargo over the cab?

A. There is.

MR. McNEES: We would like to have those marked 25A, 25B, 25C and 25D.

(The four photographs comprising the group marked Plaintiff's Exhibit No. 25, were marked respectively 25A, 25B, 25C and 25D.)

Q. As to Exhibit No. 26, is it correct that you have two pictures?

A. It is correct.

Q. Do you happen to know whether this was a Pennsylvania truck or not?

A. It is.

Q. Licensed in Pennsylvania?

A. Yes, sir.

Q. And the picture taken on the Pennsylvania highways?

A. Right.

Q. And it shows a part of the truck with the cargo-carrying space built over the cab?

A. Correct.

MR. McNEES: May we have those marked 26A and 26B?

(The two photographs comprising Plaintiff's Exhibit No. 26, were marked respectively 26A and 26B.)

Q. As to Exhibit No. 27, do you have four pictures?

A. That's right.

Q. They are all of the same truck?

A. Yes, sir.

Q. One shows a straight side view, is that correct.

A. Yes, sir.

Q. One a side view of the front part of the truck?

A. That is correct.

Q. One a rear view?

A. Correct.

Q. And another an angle view of the front part of the truck?

A. Correct.

Q. This truck is built to carry part of the cargo over the cab?

A. Yes, sir.

Q. Do you know whether this was a Pennsylvania licensed truck?

A. Yes, sir.

Q. Referring to Exhibit 27, was a part of the cargo, being crates, actually carried over the cab at the time the picture was taken?

A. It was.

MR. McNEES: We ask that those be marked 27A, 27B, 27C and 27D.

(The four pictures comprising Plaintiff's Exhibit No. 27 were marked respectively 27A, 27B, 27C and 27D.)

MR. McNEES: If the Court please, we should like to offer in evidence Exhibits 22 to 27, inclusive, with the different lettered pictures as well.

MR. KEITEL: We have no objection except as to their relevancy.

LAWRENCE WRIGHT, sworn.

MR. McNEES: Mr. Wright is an intervener party, and we hope to get his testimony on in such shape that we can have the rest of the interveners corroborate his testimony and not make the record cumulative.

Direct Examination

BY MR. McNEES:

Q. Mr. Wright, where do you live?

A. Buffalo, New York.

Q. What is your business?

A. I am employed by the Eastern Automobile Forwarding Company.

Q. What are your particular duties?

A. Chiefly that of dispatching.

Q. What does the company do?

A. Transports new automobiles.

Q. Does it do anything else?

A. That is the only thing.

Q. Does it transport them all on motor trucks or trailers and so forth?

A. There is a very small percentage driveaway.

Q. What type of equipment in general do you have? In the first place, may I ask does all your equipment carry four cars or some carry less?

A. All but six carry four cars.

Q. What do the six carry?

A. Three.

Q. Now, of the ones that carry four cars, is there a part of a car or a whole car over the cab in each case?

A. I should say that perhaps fifty per cent. carry wholly over the cab and the other fifty per cent. partially.

Q. Of the six that carry three cars, are any parts of the cars over the cab?

A. All six are whole car over the cab.

Q. And one car in the back on the tractor and one on the trailer?

A. No, two on the trailer, one on the tractor.

Q. How many pieces of equipment does your company operate?

A. About a hundred and forty-seven.

Q. Does [redacted] operate into and through Pennsylvania?

A. Yes, sir.

Q. Has your company had any accident, to your knowledge, caused by reason of the fact that there was car over the cab?

A. Not to my knowledge.

Q. Or that there was a car partly over the cab?

A. Not to my knowledge.

Q. Do you know whether there has been any accident where the loss was increased or damage caused by reason of the fact that a car was being carried over the cab?

A. Not to my knowledge.

Q. Do you consider the present equipment operated by your company as safe equipment?

A. I do.

Q. Has your company made application to the Interstate Commerce Commission?

A. It has.

Q. Covering the rights which you are now exercising?

A. Yes, sir.

Q. Was your company in business before June 1st, 1935?

A. Yes.

Q. Do you now comply, as far as you know, with all of the safety requirements of the Interstate Commerce Commission?

A. I believe we do.

Q. Do you carry insurance?

A. Yes, sir.

Q. Do you know whether your company has had difficulty getting insurance on this type of equipment?

A. Not to my knowledge.

Q. How long have you been with the company?

A. Five years.

Q. So far as you know, was all of the equipment you now operate legal for operation in Pennsylvania when purchased?

A. I believe it all was.

Q. Is it all legal for operation here now, so far as you know, except as to the restriction governing the carrying of a part of the car over the cab?

A. Yes, sir.

Q. You are not a driver yourself?

A. No.

Q. Have you ever driven?

A. Yes, I have.

(No cross-examination.)

MR. McNEES: I wonder if the most practical way would not be just to put the names of the other interveners on the record.

Mr. McNees called before the Court six persons, whose names, addresses, and the number of pieces of equipment operated by each are as follows:

H. H. Krout, York Haven, 4 pieces of equipment.

David Eyster, Shamokin Dam, Pa., 5 pieces of equipment.

J. J. Franc, Lansing, Mich., 37 pieces of equipment.

Paul W. Snyder, Carlisle, 6 pieces of equipment.

H. B. Sprecher, of Sprecher Brothers, Lebanon, 18 pieces of equipment.

R. J. Kocsis, Pontiac, Mich., 60 pieces of equipment.

MR. McNEES: If the Court please, with regard to the last six interveners whose names and addresses have just been entered on the record, we should like to ask them all if they have heard the testimony of the last witness and if asked the same question, their testimony

would be substantially the same. We have not sworn them.

(The last six named persons were sworn.)

MR. McNEES: And another question in which the Commonwealth is interested, I should like to ask any one of you to stand up who has not, in his Interstate Commerce Commission application, asked for all of Pennsylvania as territory to be served, in addition to other territory. Do we understand, then, all of you have asked for Pennsylvania?

(None of the six witnesses arose.)

MR. McNEES: May we ask one other question, and ask any one of you to stand up who does not operate into Pennsylvania or through Pennsylvania?

(None of the witnesses arose.)

(The plaintiff rested.)

JOSEPH VIZIAN, called on behalf of the defendant, and sworn:

Direct Examination

BY MR. KEITEL:

Q. Mr. Vizian, what is your full name?

A. Joseph Vizian.

Q. What is your occupation?

A. Patrolman 30th Precinct, New York City; City Police.

(A photograph was produced and marked Defendant's Exhibit "D".)

Q. I show you Defendant's Exhibit "D" and ask you whether you are the patrolman on that picture?

A. I am, standing here.

Q. State what that picture describes.

A. Do you mean in reference to the accident, how it happened?

Q. Where is the scene of that picture?

A. It is on the south side of 144th Street and Broadway.

Q. What is it a picture of?

A. An accident involving a private car and a trailer convoying new Chevrolets, I believe it was.

Q. About when did that accident occur?

A. May 16th, 1934.

Q. Is that an accurate and correct picture of the circumstances as they were when you saw them?

A. It is.

Q. Did you make an investigation of that accident?

A. No.

Q. Did you make a report on the accident?

A. No; I did not. I did speak to the Chief in regard to how the accident happened, if that's what you mean, in that last question.

Q. Well, yes, what we want to know is what you know about the physical facts as presented by this picture, about the car, for example, which you see lying on its bottom and the car which was resting upon it.

A. Well, the car here on the bottom is the car that was involved in the accident with the trailer, and the car on top of it is one of the cars that was on the trailer, on top of the cab.

Q. Was that tractor left standing, on the rear of the truck?

A. No, it was on the side.

Q. Were any of the cars detached?

A. All were detached.

Cross Examination

BY MR. McNEES:

Q. Do you know whether that trailer equipment shown in this picture is the same as testified here today was used by the parties to this case?

A. I don't know what you mean by that.

Q. Do you know what type of equipment they were operating in this picture?

A. You mean in reference to the new cars?

Q. No, the equipment, not the cars. Is it tractor, a trailer, and how many cars on the trailer?

A. Well, I believe there were two cars on the trailer and one hanging about fifty per cent, over the cab and the other fifty was down in an angle form.

Q. Do you know the make of the trailer and tractor?

A. No, I didn't notice that. I could tell by the photograph, but I didn't take notice.

Q. Now, as you understand, there was one car back of the cab at an angle?

A. Behind the cab.

Q. Yes, at an angle.

A. Yes.

Q. Do you know whether the cars were chained down or not?

A. No, I didn't notice that.

MR. KEITEL: We offer the picture, identified as Defendant's Exhibit "D" in evidence.

MR. McNEES: If the Court please, of course, we have no objection to the Court itself having the picture for its information, but, as an exhibit in the case, we desire to object to its ad-

mission unless it can be shown that the type of equipment is the type operated in Pennsylvania, and also unless we have opportunity to examine the operator as to whether or not that cargo was chained down in a manner similar to the way in which the operators who have testified chain down their cars.

THE COURT: I think I will admit it just for what it shows, and for no other purpose.

(At 3:55 o'clock p. m., court adjourned until Wednesday at 9:30.)

(On Wednesday, November 10, 1937, at 9:30 o'clock a. m., court reopened.)

MR. KEITEL: Before presenting the remainder of our case, your Honor, I wish to make a preliminary statement: That in a case of this sort, we believe that the burden of proving the Act unconstitutional and the burden of showing interference with interstate commerce is on the part of the plaintiff, and we are not attempting to assume the burden in presenting testimony; but, on the other hand, we are just attempting to justify this law as a safety measure, as a proper exercise of police power. Our testimony will consist of two types; first, testimony to show that accidents actually have happened with this type of equipment, and, secondly, to show that, due to the incontrovertible physical facts, accidents are likely to happen.

MR. McNEES: I wonder if we may offer all of the exhibits that have been identified except the truck models?

(Plaintiff's Exhibit 5, G. M. D., reads as follows:)

(Printed in Exhibit Volume, see index)

(Plaintiff's Exhibit No. 6, G. M. D., reads as follows:)

(Printed in Exhibit Volume, see index.)

(Plaintiff's Exhibit No. 7, reads as follows:)

(Printed in Exhibit Volume, see index.)

(Plaintiff's Exhibits Nos. 8 to 13 inclusive are blue prints, see index.)

(Plaintiff's Exhibits Nos. 14 to 17 inclusive are photographs, see index.)

(Plaintiff's Exhibit No. 18, G. M. D., reads as follows:)

(Printed in Exhibit Volume, see index.)

(Plaintiff's Exhibit No. 19, G. M. D., reads as follows:)

(Printed in Exhibit Volume, see index.)

(Plaintiff's Exhibit No. 20 G. M. D., reads as follows:)

(Printed in Exhibit Volume, see index.)

(Plaintiff's Exhibit No. 21, G. M. D., reads as follows:)

(Printed in Exhibit Volume, see index.)

CHARLES C. ALBRIGHT, sworn.

Direct Examination

BY MR. KEITEL:

MR. KEITEL: The purpose of this witness is to give testimony concerning the physical condition of our highways in Pennsylvania and we expect this testimony to become relevant because of future testimony concerning center of gravity of this type of equipment here in issue on the particular kinds of curves.

MR. McNEES: If the Court please, we have no objection to it for that purpose. If it anywhere fails later, we will ask that it be stricken from the record.

Q. Mr. Albright, what is your employment?

A. At the present time, I am cost engineer in the Pennsylvania Department of Highways.

Q. How long have you been employed by the Pennsylvania Department of Highways?

A. I have been employed continuously since the autumn of 1924.

Q. As such employe, are you familiar with the highways under the supervision of the department?

A. Yes, sir.

Q. In general, what would you say the terrain of Pennsylvania is with reference to highway conditions?

A. The state as a whole is rough and broken up, with low, flatter sections in the northwest or so-called Erie section of the state and in the southeast or Philadelphia section of the state.

Q. Have you made a study of the various types of curves that are present on our highways in Pennsylvania?

A. Yes, sir.

Q. Have you taken representative types of those curves?

A. I believe so.

Q. Will you please tell the Court where some of the curves are on our primary highways and where some of the curves are on our secondary highways, and explain the difference in the various types?

THE COURT: All of the curves?

MR. KEITEL: No, sir, just representative sections.

A. Well, we may find in connection with this study that there are some very sharp curves on main highways as well as on secondary or minor highways. As an example, over across the river from Harrisburg, in what is known as the "Bottleneck", on Legislative Routes Nos. 30 and 34, we find some curves there with radii varying from 130 feet up to 193 feet.

Q. Do you have any information on the degrees of those curves?

A. The degrees of those curves would vary from 30 degrees to 45 degrees. Over in Perry County, on Legislative Route 195, at what is commonly termed the Duncannon Underpass, where the highway passes under the railroad south of the Juniata River, there is a 50-degree curve at that point with a radius of approximately 118 feet.

Q. (By the Court) Can you see ahead of you very far on that particular curve?

A. Not very far, your Honor. In Lancaster County on Route 129, between Salunga and Lancaster, we find curves varying from 9 degrees and 30 minutes to 21 degrees and 30 minutes.

Q. (By the Court) Are you thinking, now, of the curve going across the river there at the bridge?

A. At Salunga. These curves vary in radii from approximately 268 feet to 603 feet. In Dauphin County on Route 1 at the so-called Dauphin Underpass just south of Dauphin, there is one curve of 18 degrees 30 minutes with a radius of approximately 311 feet, one curve of 29 degrees and 20 minutes with a radius of 197 feet. In Huntingdon County, in the east portion of Huntingdon Borough, Legislative Route 33, Traffic Route 22, there is one, what we would commonly call a right-angle turn, that has approximately a radius of 29 feet, and another curve there at the underpass of 18 degrees and 11 minutes with a radius of approximately 50 feet.

Q. Have you said anything about the Halifax curve?

A. No.

Q. That is a right angle turn?

A. That is a right-angle turn, your Honor.

Q. And perfectly concealed until you get pretty near around the old Fortenbaugh building?

A. And in Dauphin County, Route 1, between Dauphin Borough and the east end of the Clark's Ferry Bridge, there are various curves from 9 degrees to 39 degrees, exclusive of practically the right-angle turn from the highway into the bridge at the east end of it. The radii of those curves would vary from approximately 146 feet to 637 feet. Those are all important highways.

In Carbon County, on Route 510, Traffic Route 902, between Summit Hill and New Mahoney, on what we might term an important secondary route, with concrete pavement, we find numerous curves varying from 9 degrees and 30 minutes to 18 degrees

radii varying from approximately 319 feet to 603 feet. Another rural road in Carbon County, Route 13023, North of Weatherly Borough, there are various curves varying from approximately 14 degrees to 56 degrees, with radii of approximately 410 feet for the lighter curve and approximately 106 feet for the sharper curves. There are also some turns so sharp that they are not given in terms of degrees, three with a radius of approximately 31 feet each. In Lehigh County another such rural route 39003, in the extreme southern part of the county, we find curves ranging from 14 degrees to 103 degrees; the 14-degree curve is approximately 410 feet, the 103 degree curve approximately 64 feet.

In Berks County, Route 06014, in the eastern part of the county; curves varying from 12 degrees to 38 degrees, approximate rate of the 12-degree curve, 478 feet, and of the 38-degree curve approximately 154 feet. There is also one turn in the road with a radius of approximately 57 feet. In Schuylkill County, Route 53036, between Tuscarora and East Mahoney Junction, we find various curves from 16 degrees to 95 degrees. The 16-degree curve has a radius of approximately 359 feet, the 95-degree curve a radius of approximately 68 feet.

In Perry County, on Route 31, between New Bloomfield and Newport Borough, we find some curves from 11 degrees to 16 degrees, the radii varying from approximately 514 feet to 359 feet.

Cross Examination

BY MR. McNEES:

Q. Are the route numbers which you have given on the official highway map?

A. Those route numbers which I gave, I believe, were Legislative route numbers.

Q. You don't know whether they are on your official map or not?

A. I can give you some of those, if you wish.

Q. No, I just wanted to know if they are on the map.

A. I don't know; I can't say whether all the routes are shown. Not all of the rural routes, now, I say, are shown on that map.

Q. No, some of the route numbers you have given, however, are on the map, aren't they,—22 and 30?

A. Yes, those are.

Q. And some are not?

A. I am not certain whether all of those rural routes are shown on that or not. There are also, for your information, on the map—some of the rural routes are shown on there, but there is no traffic route number, either, given.

Q. Now, you have not indicated the width of the highways where they make these curves?

A. No, sir, I didn't.

Q. That would make a difference, wouldn't it, in getting around?

A. It would.

Q. Now, a number of curves you have indicated are underpasses, such as the Huntingdon and Dauphin?

A. There is one curve, I believe there, at Huntingdon, makes that underpass: the Dauphin underpass, and I think I gave one down here at the Rose Garden underpass.

Q. Now, no underpass curve is less than a right-angle, is it?

A. Less than a right angle?

Q. Yes.

A. I believe not, as far as I know.

Q. There are a number that are right angles, I suppose?

A. Approximately so.

Q. Do you know the length of equipment legally licensed in Pennsylvania? I don't want to get into a field with which you are entirely unfamiliar, but I want to ask you whether you think they can get around those curves. Do you know the length now legally licensed by the Highway Department?

A. I believe, partially.

Q. What is the length of the combination tractor and trailer?

A. I can't say in regard to the combination. I don't recall offhand the combination. I believe the maximum combination is 70 feet.

Q. Now, will you tell us whether the operating over a sharp curve is affected more by the length of the equipment or by the height of the equipment?

A. Well, that is a rather difficult question to answer. It is a combination of conditions that will depend on physical regulations on the highway proper, the pavement, as to whether that is level or has a superelevation.

Q. Well, on any flat highway with no obstruction overhead, within any reasonable degree of speed, would it make any difference in negotiating the curve?

A. Only perhaps as affected by the centre of gravity.

Q. And that would only be affected by the speed with which he made the turn?

A. Speed would have effect on that.

Q. Now, at ten or fifteen miles an hour, would you say that the angle of the curve has any practical effect on the operation at all, depending upon how high or low the load is?

MR. KEITEL: May it please the Court, I don't believe this question is proper of this witness, because the direct examination did not go into this at all.

THE COURT: I know, but we are not trying this case before a jury. It won't affect the Court one way or the other.

MR. KEITEL: Well, I understand, but this witness is employed by the Highway Department which concerns itself with the roadbed, and not with traffic conditions as such.

THE COURT: I understand he was put on the witness stand for the purpose of showing whether these sharp curves were such that they could not get around with this equipment.

MR. KEITEL: No, the purpose of this witness was merely to point out sample curves throughout the state. That was our only purpose in calling him.

THE COURT: Are you going to follow him with other testimony?

MR. KEITEL: Yes, our other testimony will go into this.

MR. McNEES: I would rather postpone this if another witness will testify on this proposition. If not, I would ask to strike out—

Q. You, of course, have recited only a very few of the curves?

A. Yes, I have just taken a few different roads.

Q. You, in general, picked the worst ones you knew?

A. No, I didn't do that.

Q. Do you know of any worse ones on the main highways?

A. Well, some of those are pretty bad.

Q. They are the worst you know of on the main highways?

A. No, I wouldn't know that. That would require considerable investigation.

Q. Well, where do you know of a worse curve than the underpass up at Marysville? I think you put that in.

A. No, I didn't cite that, because that highway is going to be reconstructed.

Q. Well, for the moment, you can't think of any worse curves than the ones you have named?

A. I don't know of any just at the present time, although I may say I didn't pick them on that basis, just to indicate some conditions both on the main highways and minor highways.

Q. Now, you don't mean you picked average curves? You picked the worst curves you could get?

A. No, I didn't say I picked the worst curves. I picked on this projection that I saw and indicated the precipitous curves on this.

Redirect Examination

BY MR. KEITEL:

Q. How does the average rural road compare in width to the primary road?

A. The average rural road has a lesser width than the primary road.

Q. What is the width of the rural roads that you have testified to?

A. I believe the improved surface of most of those rural roads is 14 feet.

Q. Can you tell us what the width of the primary highways is that you testified to?

A. I believe, with the exception of Route 510 in Carbon County, which was developed with a 16-foot pavement, all the others have 18 feet or greater pavements.

Recross Examination

BY MR. McNEES:

Q. Did you in your calculations take in account the length of equipment that could go around a curve with a 29-foot radius and a 14-foot highway? You didn't figure that out?

A. Well, it would be impractical for any of the larger equipment to keep in the proper travel-lane on a curve of that kind.

Q. It would be practically impossible for any of the larger freight trucks to keep in that lane?

A. Probably impossible for any of the larger equipment.

PAUL J. ROCHE, sworn.

Direct Examination

BY MR. KEITEL:

Q. What is your full name?

A. Paul Jones Roche.

Q. What is your official position?

A. I am connected with the Pennsylvania Motor Police at the present time.

Q. In what capacity?

A. As fingerprint expert and photographer.

Q. How long have you been connected with the Motor Police, or its predecessor?

THE COURT: A little louder.

A. As fingerprint expert and photographer for the Pennsylvania Motor Police.

Q. How long have you been affiliated with the Motor Police, or one of its predecessor organizations?

A. Sixteen years.

Q. I show you two photographs marked for identification purposes, Defendant's Exhibit "E" and Defendant's Exhibit "F," and ask you whether you took those photographs?

A. Yes, I did.

Q. What do they represent?

A. Exhibit "E" represents, as I take it, an auto carrier carrying car over the cab. This picture was taken at Amity Hall. Exhibit "F" shows the same condition with the car over the cab taken about two miles north of Harrisburg on the main River Road.

Q. Is it the same truck?

A. No, it is not the same truck.

Q. Do you know whose truck it is?

A. The one is evidently—I don't know the owner of the truck except from the markings on the truck. It says it belongs to Sprecher Brothers at Lebanon. The other one, I don't know who owns it.

Q. I show you three photographs identified as Defendant's Exhibits "G," "H" and "I" and I

ask you whether you took those photographs.

A. Exhibit "G" is a—

Q. Did you take those photographs?

A. I did.

Q. What are they? What do they show?

A. Exhibit "G" shows an auto carrier loaded with a car over the cab, one marked with the name of D. E. Eyster, Shamokin Dam, Buffalo.

Q. Where did you take that one?

A. I took this picture at Amity Hall. The second is of the same truck.

Q. What exhibit is that?

A. That is Exhibit "H," showing a partially loaded auto carrier carrying a car over the cab, and one partly on the tractor and, I would say, partly on the trailer, I can't tell definitely. That was taken at Amity Hall. Exhibit "I," taken at Amity Hall, is a photograph taken from the driver's seat attempting to show the visibility the driver might have with the superstructure or structure carrying the car over the cab.

Q. Now, are those three exhibits, "G," "H," and "I," all pictures of the same carrier?

A. That's right.

Q. I show you two photographs marked for identification purposes Defendant's Exhibits "J" and "K," and ask you whether you took those photographs.

A. I did.

Q. What do they show, and where were they taken?

A. Exhibit "J" shows the truck of Paul W. Snyder. This photograph was taken at Carlisle. It is unloaded—the truck is unloaded, the carrier. Exhibit "K" shows a loaded carrier with the car over

the cab. This picture was taken between Speeceville and Clark's Ferry Bridge.

Q. Whose name appears on the side of that truck?

A. Paul Snyder.

Q. Is that the same truck as is shown on Exhibit "J"?

A. No.

Q. I show you photograph marked Defendant's Exhibit "L". Did you take that photograph?

A. I did.

Q. What does it show?

A. It shows an auto carrier of Martin L. Specher, taken at Dillsburg. This truck is unloaded, the carrier.

Q. I show you photographs marked Defendant's Exhibit "M," "N" and "O," and ask you whether you took those photographs?

A. I did.

Q. What do they show, starting with "M"?

A. "M" is the view of an unloaded carrier. This was taken near the Juniata bridge. It seems to be a storage place for these trucks at that point. Exhibit "N" is a front view of a carrier taken at the same place. This carrier is unloaded.

Q. Is this the same carrier?

A. No, this is a different carrier. Exhibit "O" is a close picture, attempting to show the ironwork that is attached or welded to the framework over the cab.

Q. Is that the same as either Exhibit "M" or "N"?

A. I am not certain, but I think it is the same as "N".

Q. Do you know whose name was on the front of this truck?

A. Reeser.

Q. I show you Defendant's Exhibits "P," "Q" and "R," and ask you if you took those photos?

A. I did.

Q. What do they represent?

A. "P" is the photograph of an unloaded cab of Leslie Reeser at York Haven. This photograph was taken at Amity Hall. "Q" shows a picture of the cab with the car over the top of Leslie Reeser's truck, taken at Amity Hall. "R" shows the truck and trailer of an unloaded carrier of Leslie Reeser taken at Amity Hall.

Q. I show you Defendant's Exhibit "S" and ask you whether you took that photograph?

A. I did.

Q. What does that represent?

A. It is a loaded carrier of M. and G. Convoy and was taken at Amity Hall.

Q. I show you Defendant's Exhibits "T" and "U," and ask you whether you took those photos?

A. "T" is the photograph of an auto carrier with the car over the cab. This picture was taken near Dillsburg on the Gettysburg highway. "U" is a picture of the same carrier.

Q. Same as "T"?

A. Same as "T," taken from the driver's seat.

BY THE COURT:

Q. Which way are you looking in this picture "U"?

A. I was looking directly—

Q. No, not you, but which way does the driver of the truck sit?

A. This is the wheel, your Honor, and he would

be sitting about this position, directly back of the wheel.

BY MR. KEITEL:

Q. Was Mr. McCue with you when you took these pictures?

A. He was.

Q. Was anyone else with you when you took the pictures marked Exhibit "E" and Exhibit "K"?

A. Sergeant Shaffer of the Pennsylvania Motor Police was with us when these pictures were taken.

MR. KEITEL: We offer into evidence Defendant's Exhibits "E" to "U," inclusive.

THE COURT: Is there any objection?

MR. McNEES: Yes, if the Court please I am afraid we will have to take them up separately. We have no objection to the admission of Exhibit "E,"—we understand we have the right to examine him on the exhibits after they are entered.

THE COURT: Certainly.

MR. McNEES (Continuing):—"F," "G," "H," "J," "K," "L," "M," "N," "P," "Q," "R" and "T." Taking the rest in order, we should like to ask the angle of the lens with which Exhibit "I" was taken.

THE WITNESS: All of these pictures were taken with a five and a quarter focal length lens. I can't tell you the angle. It was not a wide angle lens.

MR. McNEES: It was not?

THE WITNESS: No, sir.

Cross Examination

BY MR. McNEES:

Q. Do you know the type of camera?

A. They were taken with a four by five Press-graphic.

Q. Does Exhibit "I" purport to show what was in the way of the eyes of the driver?

A. I was asked by Mr. McCue to make a photograph from the driver's seat of this car or carrier.

Q. But you did not make it from the eye level of the driver?

A. Approximately, I think I did. The Press-graphic camera operates from eye level.

Q. Isn't that a camera that you look into the top?

A. Well, you first focus it, but then to compose your view, you would look directly over the top of the camera which would leave your lens possibly two inches below eye level.

BY THE COURT:

Q. Standing or sitting?

A. Sitting in the driver's seat.

Q. Which was approximately how high above the seat?

A. I would say twenty-four to thirty inches.

BY MR. McNEES:

Q. Then objects in this Exhibit "I" which are in the vertical centre of the picture would be directly in front of the camera?

A. No, this photograph shows more of the left obstruction, or superstructure, as I think they call it, of the car. It doesn't show the view, I don't think, that would be given a driver on this side to the right of the steering wheel.

Q. But does it show in this Exhibit "I" that the

steering wheel is approximately the vertical centre of the picture?

A. Yes, I think it does.

Q. Now, is that steering wheel, then, straight here in front of the camera?

A. No, I don't think it is, sitting in the driver's seat, I didn't take the picture directly forward, I mean straightaway, sitting in the driver's seat. I tried to show the structure here.

Q. Well, you didn't sit directly behind the wheel, did you?

A. Yes, I sat directly behind the wheel, but—.

Q. Why is that wheel over to the right of the picture?

A. Because, from the position my camera was pointing to the left, showing this.

Q. Now, it does show, however, the steering wheel at approximately the vertical centre of the picture, doesn't it?

A. Yes, I think so.

Q. Well, is that the way you see it when you are sitting there driving?

A. No, it is not.

Q. As a matter of fact, isn't the top of the steering wheel much below the eye of the driver as it is in all trucks?

A. Yes, that is true.

MR. McNEES: We will have to object to Exhibit "I." We don't think it is a proper representation of the facts, Mr. Keitel.

THE WITNESS: That is true.

THE COURT: In order to avoid trying this case twice, I think that I will overrule the objection subject to future consideration of

whether or not the testimony shall be admitted. That is to say, we will admit the exhibit and pass upon whether or not it should have been admitted, when we come to write the opinion. That is what I intend to rule. In that way, we don't need to come back and try the case over again.

Q. Then will we meet the same situation with regard to Exhibit "U"?

A. That is much the same.

THE COURT: Yes, and the same ruling.

MR. McNEES: Now, with regard to Exhibit "O," may I ask what the purpose is, what is intended to be shown by it?

MR. KEITEL: Yes, you may ask him that.

Q. What is the purpose in introducng that exhibit?

A. I was instructed by Mr. McCue to make a close-up photograph of this particular car. I was instructed by Mr. McCue to photograph this cab at close quarters. The purpose, he would know more about the purpose than I do.

Q. You just followed the instructions?

A. That is correct.

MR. McNEES: May I ask, if the Court please, then, for an offer on Exhibit "O" before we object.

MR. KEITEL: Exhibit "O" was offered to show the obstruction to the vision of the driver of the vertical supports to the top runway.

MR. McNEES: Then we make the same objection.

THE COURT: They are in front of the driver's seat?

MR. McNEES: Yes, they are outside that cab and to the front of the cab.

THE COURT: Well, we will receive it subject to your objection, Mr. McNees, and pass upon it hereafter.

MR. McNEES: May we ask, also, for a statement of the purpose in offering Exhibit "S"?

MR. KEITEL: Exhibit "S" is offered merely to show what type of equipment one of the largest of these litigants is operating in Pennsylvania. It is a fair picture of the so-called rear double-deck equipment.

MR. McNEES: We have no objection to "S".

THE COURT: Very well, it is admitted.

BY THE COURT:

Q. In this picture, as I understand it, you avoided having a car over the top of the cab?

A. There is a small part of that top car over the cab—the bumper, I believe.

THE COURT: But not enough to obstruct the view of the driver?

MR. McNEES: No, there is no question of obstructing the view in that exhibit.

THE COURT: Proceed.

MR. McNEES: If the Court please, we should like to defer examination because much

of it might be avoided if we waited until later. If the witness will remain, we may want to inquire about the angle from which the pictures were taken and so forth.

THE COURT: (To the witness): Don't leave the court room.

(The witness retired from the stand.)

SINGLETON SHAEFFER, sworn.

Direct Examination

BY MR. KEITEL:

Q. What is your full name?

A. S. Shaeffer.

Q. And what is your official position?

A. Sergeant of Pennsylvania Motor Police.

Q. How long have you been connected with the Motor Police or its predecessor?

A. Going on twelve years.

Q. I show you Defendant's Exhibits "E" and "F" that have previously been offered into evidence, and I ask you whether you were present when those pictures were taken?

A. I was.

Q. Have you made any measurements of the vehicles on the pictures?

A. I did.

Q. Will you give the Court what those measurements are, first taking Exhibit "E" and then Exhibit "F".

A. On Exhibit "E," I measured from the ground; to the bottom end of the overhung vehicle, it was 82 inches; and from the ground to the driver's seat was 68 inches. From the end of the over-

hanging vehicle in front of the vehicle to the driver's eyes, 122 inches. From the bottom of the centre of the wheel of the car over the cab to the ground was 64 inches; and from a point at the bottom of the centre of the tire to the driver's seat was 50 inches; from the centre of the steering wheel to the side of the vehicle was 41 inches, and the strut on the cab that supports the carrier over the cab, that measured 4 inches.

Q. Now, proceed with the measurements on Exhibit "F."

A. On Exhibit "F," Sprecher Brothers truck, I measured from the ground to the bottom of the overhanging vehicle; it was 86 inches, and from the ground to the driver's eyes was 66 inches, and from the end of the overhanging vehicle to the driver's eyes, 124 inches, the width of the support beam was five inches and the distance from the support to the driver's eyes was 28 inches.

MR. KEITEL: May it please the Court, those measurements are offered as a basis for later testimony.

Cross Examination

BY MR. McNEES:

Q. Do you know whether there was anything between the runways holding up the car to interfere with the vision of the driver, except the bottom of the car?

A. The supporting strut interferes with the vision.

Q. The supporting strut is vertical, straight up and down?

A. That's right.

Q. I mean the two runways holding the car crosswise.

A. Why, the runway itself was before the driver's eyes.

Q. But between the two, there isn't anything, is there?

A. I didn't understand your question.

Q. Between the two runways—in other words, it is not a solid floor up there, is it?

A. No, that's right.

Q. How wide are the runways?

A. I didn't measure them.

Q. Do the outside of the runways begin outside of the driver's eye a considerable distance?

A. The runway extends beyond the line of the cab.

Q. To the left of the driver, you mean?

A. Yes.

Q. And as far as you know, there isn't anything between the left and right runway that would interfere with the driver's eyes?

A. I didn't make any measurements in that respect.

Q. Of course, that applies to both exhibits. You didn't make any measurement of it except in that respect?

A. In respect to what existed between the two runways, no.

MR. KEITEL: That is all. We would like to call Sergeant Shaeffer later for examination on another point.

LESTER MELLINGER, sworn

Direct Examination

BY MR. KEITEL:

Q. What is your name?

A. Lester Mellinger.

Q. Where do you live?

A. New Freedom, Pennsylvania.

Q. By whom are you employed?

A. Anchor Motor Freight.

Q. Were you subpoenaed to attend this hearing?

A. Yes, sir.

Q. Did you want to come?

A. Yes, when I got the subpoena.

Q. Did you want to come before you got the subpoena?

A. I didn't know what it was about.

Q. What do you do for your employer?

A. Transport automobiles.

Q. Have you ever driven on the Baltimore Pike?

A. Yes, sir.

Q. On or about October 11, 1937, were you stopped by the State Highway Patrol?

A. Yes, sir.

Q. Why were you stopped?

A. I cut to the left side of the road to miss a low limb.

Q. To miss what?

A. To miss a low limb that would damage a car.

Q. Now, what type of vehicle were you driving at that time?

A. I was driving a Chevrolet tractor and trailer.

Q. When the patrolman stopped you did he tell you you were driving to the left?

A. Yes, sir.

Q. Did you tell him why you were driving to the left?

A. Yes, sir.

Q. What did you say?

A. I told him I kept to the left side of the road to miss the low limb, although I stopped and waited approximately eight hundred or a thousand feet view in front of me before I cut to the left side.

Q. Why did you want to go to the left side of the road?

A. To keep from scratching a new car.

Q. Why did you want to do that?

A. Well, the simplest answer I can give you is if you buy a new car, you don't want to do any damage.

Q. Which car would you have scratched if you had not cut over and missed the low limb?

A. I would have scratched both front and hind car, both cars on the right-hand side.

Q. Were you arrested by the patrolman for violation?

A. No, sir.

Cross Examination

BY MR. McNEES:

Q. The type of carrier you were operating carried a car wholly over the cab, or only partly over the cab?

A. Just partly over the cab.

Q. And then another car behind that?

A. Yes, sir.

Q. Which is the higher, the one behind or the one over the cab?

A. They are both about the same height.

Q. Now, if you didn't have the car partly over the cab, would you have to pull out just the same to avoid scratching the car?

A. Yes, sir.

Q. You don't know how low that limb was, or do you?

A. I couldn't say definitely how low that limb was, but the limb extended out toward the center of the road, which would have scratched the right side of my cars.

Q. Could you tell us approximately how much below the top of your car the limb was?

A. Yes, I could. If it would have been the top of a car—it wouldn't have hit the top of the car. I had a Dodge cover on which extended down about the door handles of the car.

Q. The door handles of the two Dodge cars?

A. It would have scratched the fenders of the two Dodge cars. The limbs are, I would say, over eight feet long.

Q. You have driven that road before?

A. Yes.

Q. You knew they were there?

A. Yes, sir.

Q. You say they run out almost to the center of the road?

A. Yes, sir.

M. F. WILHERE, sworn

Direct Examination

BY MR. KEITEL:

Q. Mr. Wilhere, what is your position?

A. Private with the Pennsylvania Motor Police.

Q. In what capacity are you employed by them?

A. Why, patrolling the highways.

Q. How long have you been on the force?

A. Approximately two and a half years.

Q. You have heard the witness that just testified, Mr. Mellinger?

A. Yes, sir; I interviewed him.

Q. Were you present at the time he testified to as being stopped?

A. Yes, I was the officer that stopped him.

Q. Where was he travelling prior to the time you stopped him?

A. Well, he was driving to his right side of the highway. Then I could see—I was on a stand and was watching the traffic at that particular point. You can watch cars passing on railroad grade crossings, and there are several other violations you can see there—through traffic, stop signs and other things at that particular point in the road. I noticed this motor freight carrier come down, drive to the extreme left side of the highway, all the way over for a good distance, cross over a railroad track—the Pennsylvania Railroad has one track there in the Borough of West Grove, where this occurred; it runs five passenger trains and two freights a day through there. He crossed over that to the left side of the road, then back onto the right side of the highway again.

Q. Approximately how far did he proceed on the left side?

A. Well, from the tree around the tree and across the railroad track. I would say approximately 200 feet.

Q. When you stopped Mr. Mellinger, did you

call to his attention that he had been on the left side of the road?

A. Yes, sir.

Q. What reason did he give for being over there?

A. Well, he told me he drove to the left to avoid the low hanging branches of the tree.

Q. Did you arrest him?

A. No, sir.

Q. Why not?

A. Well, that is a question that it is hard to say. I mean he told me the truth and I realized these automobile carriers, the operators of them have a good many hardships.

Q. Would there have been any way that he could have avoided going on the left side of the road without running under the tree?

A. Absolutely not, unless he took another road altogether.

Cross Examination

BY MR. McNEES:

Q. Do you know how wide the highway is there?

A. I would say that highway there is eighteen feet, sir.

Q. Now, there is no way to get around trees and limbs except the way that he went, is there?

A. No, sir, not on that highway.

Q. Do you know about how low those limbs were?

A. Well, no, I didn't measure. I could just confirm the statement of the witness that they would have scratched his cars.

Q. Do you think they were about the way he said they were?

A. Yes, sir.

Q. Isn't it entirely legal for any equipment to go to the left when there is an obstruction in the way?

A. No, sir.

Q. What could he do?

A. Well, that is the violation. The law reads a man shall not operate to the left of the center of the highway.

Q. Is that the law?

A. Yes, sir.

Q. You don't mean that, do you?

A. Well, unless he is making a pass or he has clear vision ahead, or—but I mean if a man comes down the road and just drives to the left, there is a violation there.

Q. If he has clear vision ahead, he is all right, isn't he?

A. Yes, he is.

Q. There was clear vision here?

A. Well, he drove to avoid the tree.

Q. But he had clear vision ahead?

A. Oh, yes. No one was in danger at the time he made the pass: otherwise, there would have been an arrest.

Redirect Examination

BY MR. KEITEL:

Q. Are you an attorney?

A. No, sir.

Q. Where do you get your knowledge of the vehicle code?

A. Well, the only knowledge I ever had of the vehicle code was from efforcing it, and that in itself, I found out, is very flexible.

EDWARD H. CROWTHERS, sworn

Direct Examination

BY MR. KEITEL:

Q. Mr. Crowthers, what is your position?

A. I am patrolman on the Pennsylvania Motor Police.

Q. How long have you been so employed?

A. Approximately nine months.

Q. On or about October 18 of this year, were you instructed to make a traffic survey?

A. Yes, I was.

Q. What was to be the nature of that survey?

A. To check and see whether or not these loaded car carriers travel on the left side of the road to avoid overhanging branches.

Q. Where did you take your station for that purpose?

A. I stationed myself at the north end of Dauphin Borough, where there is a slight curve in the road and there are low-hanging trees on the right side, traveling south.

Q. How long were you there?

A. I was there from eight in the morning to five in the evening.

Q. One day?

A. Yes, sir.

Q. What is the type of road metal at that point?

A. Why, that is a narrow, flat concrete road.

Q. First of all, as to empty haulaways, what did you find as to driving on the right or left?

A. I found that there were thirteen empty ones driving on the right side of the road and five loaded ones driving on the right side, and seven loaded ones drove on the left side.

Q. And how many empty ones on the left side?

A. There were none on the left side.

Q. How about other commercial vehicles? Did you count those?

A. Yes, I did.

Q. What did you find as to those?

A. I had got a total of eight on the left side and 565 on the right side.

Q. Were the other commercial vehicles of comparable size?

A. The ones that drove on the left were.

Cross Examination

BY MR. McNEES:

Q. You made no arrests?

A. No, I didn't.

Q. Driving was not illegal in any way?

A. Driving on the left side is illegal.

Q. That is your idea of the law?

A. Yes, it is.

Q. (By the Court) Regardless of circumstances?

A. The vehicle code states, your Honor, that you shall drive on the right hand, your own right hand of the highway.

Q. Suppose now, that you come to a place where the highway is dug up?

A. Well, unless you can't drive on the right side, but where you can drive on the right side, you are supposed to drive on the right side.

Q. (By Mr. McNees) How about on the curves that have been put in evidence by the first witness? Can those trucks drive on the right side of those curves?

A. Yes, they can drive on the right side of those

curves at that point, without going on the left side.

Q. No, but I mean where there are sharp curves, don't trucks there go on the left side?

A. Well, I would say no. I would give them a warning about it. I wouldn't make an arrest, but I would give them a warning.

Q. How low were the limbs they tried to avoid?

A. I can't say exactly there. I know they would scratch the top of the car on those car carriers.

Q. How about scratching the side?

A. No, they wouldn't scratch the side.

Q. Did any of them scratch the tops of the cars?

A. Why, those five loaded ones that drove on the right side of the road around this curve, traveling south, just slight branches touched the top, but they were the type that didn't have the car over the cab.

Q. They didn't have any part of the car over the cab?

A. Not that I recall.

Q. Have you seen a trailer on the highway in the last year that did not have a part of the car over the cab, either part or all of the car?

A. Not part of them over the car.

Q. Well, are those that have part of the car over the cab just as high as those that have all of the car over the cab?

A. Well, that I can't say; I never measured it.

Q. Well, do I understand that the ones which had the cars over the cab did not get under the limbs and the others could?

A. I didn't say they couldn't. I said they drove to the left side to avoid striking the limb; that was my presumption.

Q. And some other commercial vehicles did that too?

A. Yes, they did.

Q. I am sorry to ask again where this was; I didn't listen.

A. At the north end of Dauphin Borough.

Q. Out of the borough, or in?

A. No, in the borough.

Q. Do you know how long those limbs have been over the highway at that approximate height?

THE COURT: I think the Court will take judicial notice of that.

MR. McNEES: Well, the Court will take judicial notice that they have been there long enough to be removed, is what we have in mind.

THE COURT: I will take judicial notice that they have been there for twenty years, to my recollection.

Q. Do you consider that the eight commercial vehicles which drove to the left of the highway were violating the law?

A. I did.

Q. Was there a clear vision ahead?

A. There is not at that point. It is easy to make an improper pass there, if you were passing another vehicle, but if you drive on the left side of the road, you can see a considerable distance, but not on the right side.

Q. Which way is the curve?

A. It is to the right, going south.

Q. And this was southbound traffic you were checking?

A. Yes, sir.

Q. It is legal to pass on that curve?

A. Well, some points it is, and some it isn't.

Q. Well, at the point where these limbs hung down, there is no indication on the highway that you can't pass?

A. No, there isn't.

Q. So it is legal for a car to drive entirely on the left side, driving south, if he is passing another car?

A. If he is passing another car, yes.

BY THE COURT:

Q. Is there a white line in the middle of the road there?

A. No, your Honor.

Redirect Examination

BY MR. KEITEL:

Q. Mr. Crowthers, were you instructed to make any arrests?

A. No, I was not. I was instructed to check travel only.

Q. Were you in uniform?

A. No, I was in plain clothing.

Q. Of those commercial vehicles that stayed on the right side of the road, I believe you testified 565—

A. That's right.

Q. —Did any of those 565 hit the trees?

A. Well, there were quite a number of small commercial motor vehicles, understand, just the back ends, they did strike the trees.

Q. Were any of the haulaways on the left side of the road because they were passing, do you recollect?

A. No, there was not. There was one haulaway that was traveling south that even stopped at the road to permit another vehicle traveling north to pass, so that he could drive on the left side of the road.

D. W. ANDERSON, sworn

Direct Examination

BY MR. KEITEL:

Q. What is your full name?

A. D. W. Anderson.

Q. Where are you employed?

A. Pennsylvania Motor Police, stationed in Harrisburg.

Q. Were you sent out on this traffic count in a manner similar to the last witness?

A. I was.

Q. Where was your station?

A. Three miles south of Camp Hill, on Route 15.

Q. Were you in plain clothing?

A. Yes, sir.

BY THE COURT:

Q. Which direction?

A. South.

Q. Is that coming toward Harrisburg?

A. That would be going to Harrisburg.

Q. Oh, on the Harrisburg road?

A. Route 15.

BY MR. KEITEL:

Q. What is the nature of the roadbed at that point?

A. High crown macadam road, approximately 18 feet in width.

THE COURT: Very high crowned?

THE WITNESS: Yes, sir.

Q. How long were you there?

A. 7:45 a. m. to 4:30 p. m. on the 19th day of October.

Q. What did you observe as to automobile haula-

ways, as far as driving on the left or right of the road is concerned?

A. I observed two loaded carriers operating on the right side and eight loaded carriers operating to the left of the center of the highway.

Q. How about empty haulaways?

A. There were ten empty carriers operating on the right side.

Q. Any on the left side?

A. No, sir.

Q. How about other commercial vehicles?

A. There were 273 other vehicles. However, that was 13 large type and three of those drove to the left of the center of the highway.

Q. The remaining ten drove to the right?

A. Yes, sir.

THE COURT: Was it rainy or clear?

THE WITNESS: It rained all day.

Q. Are there any overhanging limbs or trees on that highway?

A. There is on both sides. On the east there are a number of trees. On the west side there is one tree which is a little farther south than the trees on the east side.

Q. Are those trees sufficiently low to come in contact with auto carriers?

A. Yes, sir; not to the extent that would cause them to drive to the left of the center of the highway, which would cause them considerable damage, due to the fact that there were two of them drove to the right.

Cross Examination

BY MR. McNEES:

Q. Did you just check traffic moving in one direction?

A. Both directions.

Q. Which way were the car carriers moving that operated on the wrong side?

A. South.

Q. And they pulled over to the east side?

A. That would be to the west, wouldn't it?

Q. Well, I am just wondering.

A. Sir?

Q. I am just wondering. I understand your testimony to say that the east side was worse than the west. Now, if they were moving south, which way did they pull?

A. On the west side of the highway was a number of trees.

Q. Yes?

A. On the east side was one tree which was a little farther south than the trees on the west.

Q. Now, the southbound loaded carriers pulled left. That would, of course, be to the east, wouldn't it?

A. Yes, sir.

Q. How far over did they go?

A. The left wheels would be over the center of the highway.

Q. Well, is there a curve there?

A. No, sir; it is a straight stretch.

Q. Didn't you observe lots of passenger cars and very small trucks that had their left wheels over the center of the highway?

A. Not as much as the car carriers or the other three large commercial.

Q. But at many times there are more passenger cars than carriers that have to?

A. At this particular part of the highway, the ground is not as high as others. There is an intersection a little farther south of those trees and the

ground is not as high as some other parts of this highway.

Q. There is nothing illegal about having the left side of your car pass the left side of the highway?

A. The first car carrier I observed traveling south drove to the left center of the highway.

Q. How far?

A. For a distance of approximately 150 feet, and, in doing that, he caused a car traveling north to drive on the berm of the highway.

Q. How far left of the center was it?

A. Oh, I can't say, but his left front wheel was approximately in the right center of this right lane of traffic going north—or, it would be his left.

Q. Probably two or three feet?

A. That's right: maybe might be four or five feet.

Q. You did say the berm was travelable over there?

A. Yes, sir.

Q. Put there for that purpose?

A. It was put there not to travel, it was put there to park traffic if necessary.

Q. Did you see any Pennsylvania convoys coming north?

A. Yes, two.

Q. What did they do, pull over to the west?

A. There was one drove to the center and one kept on its right, sir.

Q. The one that drove west of the center, about how far west was he of the center?

A. They all drove about approximately the same distance over the highway, but not past each other.

Q. But I am thinking about how far he was from the center of the roadway, over to the other side.

A. Approximately the center of the highway.

Q. That is, approximately the center of the roadway?

A. Yes, sir.

Q. All of those trucks, when they got out of their own line, were traveling in the middle of the highway?

A. That is, car carriers?

Q. Yes.

A. Yes, sir.

Q. Do you know how high the limbs are there?

A. No, I don't.

Q. Do you know how high the legal limit of trucks is in Pennsylvania?

A. Thirteen feet.

Q. Did you see any convoys or other trucks, either, that were that high?

A. I couldn't say; I didn't measure any of them. There is none of them over the legal limit.

Q. Isn't it true that any truck going through there of the same height would have the same difficulty as a car carrier?

A. No, sir.

Q. Why?

A. There were ten trucks, which would be approximately similar to the height of the car carrier, that kept to the right side of the highway.

Q. Well, were they scratched up?

A. No, they didn't brush it to the extent that there would be any leaves fall.

Q. But they did brush them?

A. Yes, they brushed them.

Q. So the only way they could avoid it would be to go out in the middle of the highway?

A. That's right.

Q. Your theory, I suppose, is that other cars are

not damaged by that, but the car carriers would be damaged?

A. Well, some of the car carriers passed through there. Not all the carriers traveling south drove to the left of the center.

BY THE COURT:

Q. I suppose they did that until they got on the concrete road?

A. Well, your Honor, as they travel south there is a slight grade which they would ascend before they came to these trees.

Q. Where are the trees? What part of the road, after they turn off the Carlisle road toward Gettysburg?

A. Stark's gas station is located approximately a couple hundred yards south of an intersection where a rural school is located.

Q. (By Mr. McNees) Well, you were about three miles south of Camp Hill, you say?

A. Yes, sir.

Q. You were almost where the concrete pavement begins, then?

A. No, sir.

Q. Where does it begin?

THE COURT: Six miles from Harrisburg.

MR. McNEES: On the Gettysburg road?

THE COURT: Yes.

Q. Or were you on the Carlisle road?

A. No, sir, I was on the Gettysburg highway, Route 15.

Q. Is there a sharp curve where you were stationed?

A. Straight stretch, sir, except where I was standing, carriers traveling south would ascend a slight grade before they reached those trees. When they came to the crest of the grade, they start bear-

ing to the left of the center of the highway to avoid the overhanging trees, and when they come back they pass to the right lane of traffic.

BY THE COURT:

Q. Those trees are on the Harrisburg side of this road, before you come to that woods, aren't they?

A. No, sir.

Q. In other words, the concrete road begins at the woods?

A. Yes, it is north of the concrete.

Q. Well, when you say north, you mean the Harrisburg side?

A. The Harrisburg side.

BY MR. McNEES:

Q. Do you know whether the trees are planted on private lands or public highways?

A. I don't know what would be the legal right of way there. I am not in position to state.

THE COURT: What Mr. McNees intended to ask was, were they on the other side of the fence?

THE WITNESS: Well, there is no fence there.

L. D. JENKINS, sworn.

Direct Examination

BY MR. KEITEL:

Q. Your full name?

A. L. D. Jenkins.

Q. What is your position?

A. Patrolman in the Pennsylvania Motor Police.

Q. How long have you been on the force?

A. Approximately two years.

Q. Were you assigned to this same traffic count that you heard testimony about?

A. Yes, sir.

Q. Where were you stationed?

A. Four miles south of Lenoyne on Route 15.

Q. Is that the Gettysburg road?

A. Gettysburg pike.

Q. Were you in plain clothes?

A. Plain clothes, yes, sir.

Q. What type of road is it at that point?

A. A very high-crowned road.

Q. Are there any overhanging trees?

A. Yes, both sides.

Q. Now, did you make a report of commercial vehicles and motor haulaways passing that point?

A. I did.

Q. On what day, between what hours?

A. October 23, between the hours of 7:45 a. m. and 4:30 p. m.

Q. What do you know concerning these various types of equipment with reference to their traveling on the right of left side of the highway?

A. The total number of car carriers that passed was ten. Seven car carriers were on the right side of the highway, three were on the left side of the highway.

THE COURT: Are you trying to prove a custom of driving in the middle of the road? Is that the purpose of this evidence?

MR. KEITEL: We are trying to prove, your Honor, that these vehicles carrying automobiles at this height over the cab, it is customary for them to be driven on the left side of the road whenever they come to any trees, and that constitutes a dangerous practice which is not uni-

versally followed in other big trucks which would also have to go under the trees, and, of course, the reason for that is obvious, because they don't want to scratch these new cars, and it puts them in a peculiar class, makes them different from these other big things that come along the road.

THE COURT: No matter whether the top's scratched or not.

MR. McNEES: If the Court please, I think that he ought to show that this is illegal operation before we go ahead with further testimony of this sort.

THE COURT: I am not trying to tell the attorney-general how to try his case.

MR. McNEES: I won't tell him either, then.

THE COURT: We will take care of that when we come to study the testimony.

MR. McNEES: We believe, your Honor, that the question of whether it is illegal operation is a question of law, and not one for these witnesses, unless we merely want to get their ideas.

THE COURT: Why are you calling them?

MR. KEITEL: We are calling them as to what they saw.

THE COURT: You think yourself that the evidence is impertinent?

MR. KEITEL: No, not impertinent.

THE COURT: Well, what is it?

MR. KEITEL: It is very relevant to show—

THE COURT: Are you going to try to establish a custom that a lot of people drive on the wrong side of the road and violate the law?

MR. KEITEL: We want to show that these people, because of their load, drive more on the

wrong side of the road than anybody else. I think that is pertinent, because our right to pass this law has been challenged because it is not a safety measure.

THE COURT: Are you proposing to call all of these people?

MR. KEITEL: We feel that we ought to call them all because Mr. McNees might think we are hiding something, and we are going to show that we have given all the facts that that survey disclosed.

MR. McNEES: If the Court please, I think we ought to note these formal objections, since the purpose is to show the custom, that all these witnesses have testified as to the custom. There might be a higher crown or a bump or anything that chased people over. Now, the other witnesses did not have the information, and unless this witness has, I think we ought to object; and further than that, it is entirely an assumption that they drove over to avoid a limb because none of them have been questioned as to why they went over.

THE COURT: I think that most of this testimony will have to be ruled out after we come to consider it. We will get it on the record and then we won't have to try this case over again.

MR. McNEES: Will your Honor enter a general objection—

THE COURT: We will consider you are objecting to everything.

MR. McNEES: May we note, please, further things which occur to us which may persuade people to drive to the left, such as bumps and irregularities, or a dead dog may persuade them to pull over to the left side.

THE COURT: That would hardly be a violation of the law, anyhow, these incidents you have mentioned.

MR. KEITEL: You say it would not be, or would be?

THE COURT: It would not.

MR. KEITEL: The contention is that it would be. You can't drive to the left—

THE COURT: Then you couldn't drive to the left to save the dog or flock of chickens? You can't make this court believe that.

MR. KEITEL: That is not my theory.

THE COURT: We have not expressed our theory on that.

BY MR KEITEL:

Q. Were these cars that you reported driving in both directions?

A. Both directions.

Q. Did you check the physical facts as to the ones that were empty and the ones that were loaded?

A. That is, just the car carriers?

Q. Yes, just the car carriers?

A. Yes, sir.

Q. What are they with reference to the loaded ones?

A. On the wrong side of the road, there were three loaded and no empty. On the right side of the road there were five empty and two loaded.

Q. How about other commercial vehicles?

THE COURT: Which way were you looking when you say the right and left side of the road?

THE WITNESS: I said the wrong and the right.

THE COURT: Very well, I understand you.

A. The other commercial motor vehicles, there

were 238 on the right side of the road and on the wrong side were 43.

Q. Did you testify about branches over this highway?

A. There were trees on both sides of the highway. The branches extended over the highway.

Q. Low enough to come in contact with these carriers?

A. With the right sides of the car carriers.

Q. In both directions?

A. Both directions.

Q. Were any of these commercial vehicles that were on the right side of the road tall enough to come in contact with those trees?

A. Yes.

Q. Were there any dead dogs or other obstructions in the road?

A. No obstructions on the highway.

Cross Examination

BY MR. McNEES:

Q. Did you give us the figures of the traffic moving both ways?

A. Both directions.

Q. I didn't find out where you were stationed?

A. Four miles south of Lemoyne, on Route 15, Gettysburg pike.

Q. On what date?

A. 23rd of October.

Q. Do you know whether you were checking the same day that others were and counting the same trucks?

A. No; I was not checking the same day.

Q. Someone helped to check on the 23d, didn't they,—Mr. Jenkins?

A. No, sir.

MR. McNEES: It was our record that "Mr. Jenkins" was checking. I didn't recognize you.

Q. Will you tell us whether there were any car carriers that went by that didn't have any cars exposed at all, what we call tanks, big car carriers that have all the cars inside?

A. I don't know that.

Q. Do you know whether the car carriers that you did see had cars over the cab?

A. Yes, sir.

Q. Did any of them have cars just partly over the cab?

A. Yes, sir.

Q. Do you know how many of each?

A. I think there were two cars completely over the cab, and I believe the rest of the ten were partly over the cab, the bumper or some part of the fender.

Q. Do you know whether all of them carried a second car, also, at approximately the same height as the car over the cab?

A. No, I do not.

Q. Did you say whether they were four-car carriers or three?

A. They were four-car carriers.

Q. Weren't there two cars of approximately the same height on those carriers?

A. On the carriers that were partially over the cab, the front car was approximately the same height.

Q. Wasn't it just as high or just as low as the one behind it?

A. Yes, sir.

Q. On the same level?

A. Yes, sir.

Q. Isn't that true, too, of the cars wholly over the cab? Aren't both cars the same way?

A. That I don't know.

Q. Do you know how low the trees are where you checked?

A. I didn't measure, but they are low enough to scratch the sides of the cars.

Q. Forty-some other tracks pulled over to the left?

A. Yes, sir.

Q. Are there trees on both sides?

A. Both sides.

Q. So that the way to get through is in the middle, is that right?

A. Well, you don't have to go in the middle.

Q. No, but if you are going to avoid the trees, you must go in the middle?

A. Yes, sir.

Q. And that is about what they did, traveling in each direction? They went to the centre of the highway?

A. They went to the centre of the highway.

Q. Did you keep any track of all cars that went off the centre?

A. No, sir.

Q. Do you remember whether there were a considerable number that went over to the left of the road?

A. I don't remember.

Q. Is the road pretty well crowned there?

A. It is a high-crowned road there.

Q. Is it straight?

A. Straight, yes, sir.

W. J. FARRA, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Farra, where are you employed?

A. Pennsylvania Motor Police Patrol.

Q. How long have you been on the force?

A. Approximately a year.

Q. Were you sent out on this traffic count?

A. Yes, sir.

Q. Where did you go?

A. To the west end of Hummelstown, on Route 422.

Q. When was that?

A. The 22d day of October.

Q. Between what hours?

A. From 7:45 to 4:30 p. m.

Q. Is that outside the borough limits?

A. No, sir.

Q. What type of roadway is it there?

A. It is a wide, flat concrete surface type. It has trolley tracks running up the centre, with nine feet concrete highway on each side of the trolley tracks.

Q. Are there any overhanging trees?

A. Yes, sir.

Q. What did you observe with reference to auto haulaways, and other commercial vehicles concerning their operating on the right or left side of the road?

A. There was one car carrier that passed there between those hours. It was traveling east on 422, on the trolley track.

Q. Would you say that he was on the left side of the road?

A. Yes, sir.

Q. Just one?

A. That is the only one that passed.

Q. Was it loaded?

A. Yes, sir.

Q. What about other commercial vehicles?

A. There were 37 other commercial vehicles on the wrong side and 120 other commercial vehicles on the right side.

Q. Were any of the commercial vehicles on the right side large enough to make contact with the trees?

A Yes, sir.

Q. Would you say approximately how many?

A. Oh, approximately a hundred.

Cross Examination

BY MR. McNEES:

Q. You say there was only one convoy moved in either direction during all the time you were there?

A. Yes, sir.

Q. And probably a hundred other trucks that were large enough to brush into the trees?

A. Yes, sir.

Q. Did the convoy carrier go beyond what would be the centre of the road with the centre of his truck, or did he go just to the centre, about?

A. Well, his left wheels would be over the centre line. There is a white line and his radiator was over the white line.

Q. Do you know how low the trees are?

A. Possibly ten feet.

Q. Are they the same height on both sides of the roadway?

A. Yes, sir.

Q. And the only way it got through without touching or scratching would be through the centre?

A. Yes, sir.

Q. How far were you from Harrisburg on the section of Route 322?

A. I was possibly two miles west of Route 322.

Q. Route 322 intersects with 442, right at Hummelstown?

A. 322 bears over to the right at the east end of Hummelstown.

Q. Where were you, then?

A. I was at the west end of Hummelstown.

BY THE COURT:

Q. 322 is what is commonly known as the Horseshoe Pike?

A. Yes.

BY MR. McNEES:

Q. The old 25?

A. Yes, sir.

Q. Was there any sharp curve there?

A. No, sir, it is a straight level stretch.

Q. And the cement highway is about how wide?

A. It is approximately twenty-four feet.

Q. The street cars operate in that territory?

A. Yes, sir.

Q. They run in the middle of the highway?

A. Yes, sir.

J. J. NORT, sworn.

Direct Examination

BY MR. KEITEL:

Q. What is your name?

A. J. J. Nort.

Q. Where are you employed?

A. Pennsylvania Motor Police.

Q. For how long?

A. Three years.

Q. Were you assigned to this traffic count?

A. I was.

Q. Where did you go and when?

A. On the 21st of October, I checked for these convoys three miles south of Camp Hill on Route No. 15.

Q. That is, the Gettysburg pike?

A. The Gettysburg pike, yes, sir.

Q. What is the type of roadway at that point?

A. It is a high-crowned road.

THE COURT: Isn't this cumulative?

MR. KEITEL: It is cumulative, but we feel we have to give the whole picture.

THE COURT: Haven't we had the whole picture of that road?

MR. KEITEL: Well, if we leave some of our men out of this thing, the whole survey would not be complete. We are willing to give a recapitulation.

THE COURT: Go ahead.

Q. What did you observe with reference to the driving on the right or left side of the highway of any haulaways or any commercial vehicles?

A. I noticed two car carriers on the wrong side of the road, one was loaded and one was unloaded.

Q. How many did you notice on the right side of the road?

A. On the right side of the road there were very few loaded carriers going on this day. There were 13 on the right side of the road, there was one

out of the thirteen that was loaded.

Q. How about other commercial vehicles?

A. Other commercial vehicles, there were 9 on the wrong side of the road and 262 on the right side.

Q. Were there any trees at that point?

A. Yes.

Q. Were they low enough to come in contact with these carriers?

A. Yes, sir.

Q. Were the other commercial vehicles which passed on the right side of the road high enough to brush under the trees?

A. Some of them did brush trees; they were pretty high.

Cross Examination

BY MR. McNEES:

Q. Were the two loaded convoys you saw that day the type that have cars over the cab?

A. They both had cars over the cab.

Q. And cars about the same height immediately back of those?

A. Why, no, sir, these cars on those two that I saw on this day were slightly higher than the cars that were back on the trailer.

Q. That is, the front car, you think, was higher than the back?

A. Yes, sir.

Q. Did that one convoy that went on the wrong side go beyond the centre of the road with the centre of his truck?

A. He was riding the centre of the road.

Q. Now, did you make any observation, even if

you didn't count, as to how many other cars were in the centre of the road at that point? I don't mean commercial vehicles, I mean other passenger cars.

A. Passenger? No, sir, I didn't.

Q. Could you tell us whether a great many did? Fifty or a hundred or a thousand?

A. They stayed on their own side pretty well; probably one or two would go over the centre.

Q. Is there a white line there?

A. No, sir.

Q. A little hard to tell exactly where the centre is, isn't it?

A. Well, I wouldn't say that.

Q. The centre is the top of the hill, isn't it?

A. The centre is in the centre of the road.

T. C. MAHALIK, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Mahalik, where are you employed?

A. I am a member of the Motor Police.

Q. How long have you been on the force?

A. Possibly two years.

Q. Were you assigned to this traffic count?

A. I was, on the 20th day of October.

Q. Where?

A. At Shellsville, on Route 22.

Q. What kind of a highway is that?

A. A flat concrete type.

Q. Wide or narrow?

A. Wide; that is, about eighteen feet in width.

Q. Were you there all day?

A. From 7:30 a. m. to about 4:30 p. m.

Q. Are there any trees in that vicinity?

A. Yes, there are on the north side of the highway.

Q. What did you observe with reference to the operation on the right or left side of the road concerning auto haulaways or other commercial vehicles?

A. On the wrong side of the road I noticed one car carrier that was loaded, five other commercial vehicles. They were all traveling west at the time. They were on the wrong side of the road. On the right side of the road I noticed five carriers, four of which were empty and one of which was loaded, and 302 commercial vehicles traveled on the right side.

Q. Did any of these other commercial vehicles that were on the right side of the road come in contact with the tree?

A. Quite a few.

Q. Half of them, would you say?

A. I wouldn't say half; about a quarter of them.

Cross Examination

BY MR. McNEES:

Q. Did you make any check at all of what we call passenger cars?

A. No, sir.

Q. Are the trees overhanging on both sides?

A. No, sir, just on the north side of the highway.

Q. Is there a white line at that point?

A. No, sir.

Q. Any curve there?

A. No, sir, straight.

Q. The operators have a clear vision ahead?

A. Yes, sir.

Q. Do you know how low the limbs were?

A. No, I don't; I didn't measure them.

Q. Is the best way to get through there to go through the centre of the road, if you have a high vehicle?

A. No, I wouldn't say.

Q. If you wanted to avoid scratching, though, you have to, don't you?

A. Yes, sir.

Q. Do you know whether the car carriers you saw had cars over the cab?

A. Yes, I think the one did, the one that pulled over to the left.

Q. And that one also had a car right back of the one over the cab?

A. Yes, sir.

Q. Was that about the same height?

A. I couldn't tell you that.

S. SHAEFFER, recalled.

Direct Examination

BY MR. KEITEL:

Q. You have heard the testimony of these men concerning the traffic survey?

A. Yes, sir.

Q. Were those men under your direction?

A. Yes, sir.

Q. You instructed them to make the survey?

A. I did.

Q. And have they reported back to you?

A. Yes, sir.

Q. Did you send any other men out for this purpose?

A. No, those were the only men, the men who have testified.

Q. And you heard their testimony. Are those the same results that they gave you?

A. Yes, sir.

Q. And those are all the results that they gave you?

A. Yes, sir.

Cross Examination

BY MR. McNEES:

Q. They had no instructions to report cars other than commercial vehicles or car convoys?

A. No, sir.

JOSEPH J. DeSANTO, sworn.

Direct Examination

BY MR. KEITEL:

Q. What is your full name?

A. Joseph J. DeSanto.

Q. Where do you live?

A. Mount Pocono.

Q. What do you do for a living?

A. I am in the ice and coal business.

Q. On about June 23, 1937, were you involved in an accident?

A. Yes, sir.

Q. What were you driving at that time?

A. You mean what vehicle?

Q. Yes, what vehicle were you driving?

A. I was driving my own truck V-8, truck '35.

Q. Now, describe to the Court just what occurred at that time.

A. Well, I was coming east into Mount Pocono, which otherwise you would say into New York, they call that east coming down that way on the railroad. I was doing around—well, at first I was doing around thirty. I cut it down to twenty and was just about to make a left-hand turn down the road around—as you know yourself, an iceman has to cut in across, all around, just to get around, and lots of times people don't see you. Half the time they just come down the road and cut across any old way they want to. Well, I was coming down that road and I took off my left hand and pushed out my indicator, because lots of times I notice that people don't notice, they just pass you anyhow.

Q. You mean your turning signal?

A. Yes, they pass you, anyhow.

MR. McNEES: If the Court please, unless this is to be followed by evidence that the actual presence of a car over the cab of a truck caused the accident, we should like to object to it, both in the interest of time and because we do not think it is relevant.

MR. KEITEL: The objection is well taken. We will try to get to the point of this thing. There will be evidence of that.

Q. What type of vehicle collided with you?

A. There was no collision with me.

Q. Well, what happened?

A. Well, this vehicle behind me, I guess he took notice a little too late about trying to pass me—

MR. KEITEL: Just leave out the guesses.

THE COURT: Now, what you know and not what you guess.

A. Well, that I know. I gave the signal at least 175 yards, making my left-hand turn. He probably wanted to pass me, but he seen it was too late for his speed and he cut to the right and into a ditch and upset.

Q. What kind of a vehicle was it?

A. This was an auto trailer with cars on.

Q. How many cars were on it?

A. Four Packards.

Q. Was there a car over the cab of the truck?

A. Well, a car did hit the cab when he pulled up.

THE COURT: Answer the question.

BY MR. KEITEL:

Q. Was there any car being hauled over the cab of this equipment that ran into the ditch?

A. Not right over the cab.

Q. Was it partly over the cab?

A. Partly.

Q. Who owned this car hauler?

A. The Auto Forwarding Company.

Q. How do you know that?

A. Well, I really—I took the driver's—he showed me his card and all, and I took it all down.

Q. Now, you say this vehicle ran into the ditch. What happened to it, then?

A. Just turned over.

Q. What happened to this car that was up over the cab partly?

A. Well, the sudden—I imagine the sudden stop of it—

MR. KEITEL: No, tell us what happened.

THE COURT: No, don't imagine.

A. The sudden stop of the trailer, the car over the top jerked off of the top of the cab kind of put a dent in the cab of the trailer.

Q. Of the hauler?

A. That's it—chassis, whatever you call it.

Q. What happened? Where did it go from there, the car that was partly over the cab?

A. Into a rock pile over on the right, across the ditch.

Q. Was it completely detached?

A. I wish to have you explain that.

THE COURT: Ask him if it was torn loose.

Q. Was it torn loose?

A. Yes, it was torn completely loose off the trailer.

Q. Were any of the other three torn loose?

A. There were two cars torn loose, completely off the trailer in to the woods.

Q. And the other two cars?

A. They were underneath. They couldn't hardly get out.

Q. Do you know how those cars were fastened to the truck?

A. I seen that there was a chain coming down from the rear axle housing, whatever you call it, onto your trailer, in the front and back; the tops were cracked and they just snapped right off when they suddenly stopped.

Cross Examination

BY MR. McNEES:

Q. You say that this car ran off the road to avoid hitting your car, is that what you said?

A. Yes.

Q. When you pulled left, what road were you going to turn into?

A. It was no road.

Q. There wasn't any road at all there, was there?

A. It was a public tourist place — otherwise, what you call it, a hotel of some kind.

Q. There was no public road to your left at all?

A. No, sir.

Q. And you decided to pull left to go into the tourist place, is that it?

A. Yes, sir.

Q. Hauling ice at the time?

A. Yes, sir.

Q. Was the accident investigated by the patrolman, do you know?

A. Yes, I immediately called them up and reported, I and the other fellow.

Q. You called him up?

A. No, I didn't, the Auto Forwarding people did, but I was right there at the time, see, when he did it.

Q. But the information which the truck driver gave was given to you and written down by you instead of the patrolman, was that right?

A. Well, the gentleman asked me for my information about me and I asked him for his information, so that was all it was, between us two.

Q. Did the whole trailer tractor and all turn over?

THE COURT: You mean each one asked the other for the driver's license?

THE WITNESS: That's right.

BY MR. McNEES:

Q. Did the whole equipment turn over, tractor, trailer and all?

A. No, sir, just the two cars completely busted, cracked the trailer and went over.

Q. What happened to the tractor?

A. It started on its regular way, didn't turn even.

Q. Was there a car on the tractor at the back?

A. There was only two that was inside of your trailer, the two top ones flew off.

Q. Now, the two top ones were on top of the trailer?

A. Yes, sir.

Q. Do you know what type equipment this was?

A. Just what it was?

Q. Yes.

MR. McNEES (To Mr. Keitel): That is, may I help this man?

THE WITNESS: You can show me a picture and I'll tell you what type it was.

MR. McNEES: We will show you on the picture.

Q. Can you tell us whether all of the weight of all of the cars was on the trailer?

A. If all the weight of the trailer was on the car?

Q. No, was all the weight of all the cars on the trailer?

A. You mean after the accident?

Q. No, before. Were all four cars on the trailer? Is that the way they were?

A. They were all on the trailer.

Q. Do you know whether—

THE COURT: Then there was no car on part of the cab?

THE WITNESS: No, just what stuck over the cab was on the trailer.

BY MR. McNEES:

Q. How far did it tip over?

A. I would say quarterways, or sideways. Just show me one of those pictures.

Q. I just wanted to see what you remembered about it, because I have in mind all you could see was in your mirror, and I am wondering how—

A. Well, I have seen other trucks just like this every day in the week.

Q. How far over the cab was that car in this particular instance?

A. I don't measure it, I couldn't tell you.

Q. You didn't see it, either?

A. Yes, I did.

Q. Before the accident?

A. Through my mirror, I seen it before the accident.

Q. Through your mirror, what did you say was the distance that the car hung over the cab?

A. About a foot, most.

Q. You were directly in front of the carrier?

A. Yes, sir.

Q. Could you see through the mirror, or if you stood in the highway looking ahead, how far a car was over the cab?

A. Well, you couldn't hardly tell whether a car was over the cab.

Q. It was pretty hard to say?

A. It is, I agree with you.

Q. As far as you know, would it be possible that this equipment was one of the double-deck trailers in which no part of any car is over the cab? Have you seen equipment like that?

A. Double-deck?

Q. Yes.

A. Without the car over the trailer completely?

Q. Yes.

THE COURT: Now, you don't mean the car over the trailer, but the car over the cab.

MR. McNEES: Yes.

THE WITNESS: That I really am not sure of. I see so many of those.

MR. McNEES: It seems to me, if the Court please, that none of the evidence is relevant and we move to have it all stricken from the record unless he can say with reasonable positiveness that there was a part of the car at least over the cab; and we move to strike it out.

THE COURT: Among the many conflicting statements that he has made, he said it was over the cab about a foot.

MR. McNEES: If the Court please, he has also said his point of view, and I think you would have to take judicial notice that he couldn't see that.

THE COURT: I think I will be able to handle that when the time comes.

BY MR. McNEES:

Q. I show you Plaintiff's Exhibit 3E and ask you whether or not that was the type of carrier you saw.

A. That was the same type as 3E except the chasis—

Q. Do you remember—

MR. KEITEL: The same type except what did you say? Except the chassis?

THE WITNESS: You haven't got any pictures of the Auto Forwarding Company, have you?

MR. KEITEL: I don't believe we have.

MR. McNEES: May I ask the witness whether, in his judgment, the equipment was more like Exhibit 3E or Exhibit 3F, which is this one (indicating).

THE WITNESS: These are about the same, are they not? Would you call them the same? They look like the same type, only the framework.

(Mr. McNees: Indicating Defendant's Exhibit "S" and Plaintiff's Exhibit B.)

BY MR. McNEES:

Q. Was the equipment as you remember it more like Defendant's Exhibit "S"?

A. It was like that. It was two loose ones on top (indicating Defendant's Exhibit "S").

Q. Do you remember whether there was a cab over the motor on the tractor, or was the cab back of the motor on the tractor?

A. The cab was back of the motor on the tractor.

Q. So far as you know, then, was there any difference between the equipment you saw and that on Exhibit "S"?

A. The framework and chassis, different type in the car and trailer.

Q. You mean what you saw was a little different type?

A. Different type, but it was ordinary about the same type.

Q. How fast was the trailer going when the wreck occurred? Do you know?

A. That I couldn't tell you.

Q. You were going about thirty and you slowed down to twenty?

A. Yes, sir.

Q. You made your turn at twenty?

A. No, I was cut down much more than that when I made my turn.

Q. Did you see the trailer coming behind you before you started left?

A. Well, I didn't start left right away, I seen them way back and I gave warning.

Q. By signaling by hand signal?

A. By hand and indicator both.

Q. You have a direction signal?

A. I have.

Q. How far back was he when you saw him?

A. When I first saw him? I would swear he was at least a hundred yards or better away.

Q. And had you gone clear over the road before he upset?

A. No, I had not.

Q. You were still on the right side of the road, were you?

A. No, when I heard the crash on my right, I immediately turned left, just about short, to make my swing being afraid that he would crash into my car.

Q. Well, you were then on the right side of the road and afraid he would run into you, weren't you?

MR. KEITEL: May it please the Court, wasn't this testimony ruled out on direct examination? The relevancy of this testimony is what happened to the trailer, not what happened to this witness.

THE COURT: Yes, I think that is true. It doesn't matter much where he was. The question is, where was the trailer?

THE WITNESS: It was in the woods when we got done with it.

BY MR. McNEES:

Q. You said the cars that the trailer was carrying were Packards?

A. Yes, sir.

Q. All four of them?

A. I know of two of them. I didn't examine everything. I was kind of shaky, afraid I was going to be killed, the way he hit that bank.

Q. You don't know what model they were, whether they were long or short ones?

A. I only own a Ford, and that's as far as I ever got on a Packard.

Q. No one was hurt in the accident?

A. No, no one was hurt.

Q. What is the rise of the road in the direction your truck went? Was it a bank up or down?

A. It was very slight, hardly you wouldn't call it really a bank. Just what you call a drain on the highway where water would go down instead of settling on the highway.

Q. What stopped that truck?

A. What stopped the truck? When he hit suddenly, the top hit the bank.

Q. Well, then, it must have been pretty much of a bank?

A. You don't need much bank where water would settle into a ditch.

Q. Can't you tell us about how high the bank was?

A. Well, right off the road, the bank I wouldn't say was a foot high, but within the ditch, I imagine, it's two feet high.

Q. How quickly did he stop, in what distance?

A. That I couldn't tell you because everything happened so quickly.

Q. Well, was the front of his trailer, when it had stopped, ahead of your truck?

A. Oh, no.

Q. He stopped back of your truck?

A. Back of my truck.

Q. Stopped very suddenly?

A. He had to.

Q. Well, the bank stopped him, you say?

A. That's right.

J. J. TAMA, sworn.

Direct Examination

BY MR. KEITEL:

Q. What is your full name?

A. J. J. Tama.

Q. Where do you live?

A. Daleville, Lackawanna County, Pennsylvania Motor Police.

Q. How many years on the force?

A. Four years.

Q. Did you hear the last witness testify about an accident in June of 1937?

A. I have.

Q. Did you have any personal contact with that accident?

A. Yes, sir, I did.

Q. Tell the Court just what your connection was.

A. Why, on the date of June 23d we received a telephone call at 9:30 a. m. reporting an accident out one-fourth mile north of Mount Pocono on Route 611—that is, in Monroe County,—and proceeded immediately to the scene, arrived there approximately 9:55 a. m. Arriving upon the scene, I

found it to be a two-truck accident; that is, a convoy automobile carrier and a truck used in hauling ice and coal. The car carrier had been proceeding south towards New York, in that direction, and it was there at the right of the highway standing to the right, facing south. Two of the cars that this carrier had been hauling had completely fallen off the trailer, to the right of the tractor; that is, not on the highway, to the right. The right had been a wooded section, and it fell in there. While checking over the scene, I found marks upon the highway which were made by the car carrier showing that the operator had applied his brakes and the marks showed it traveled 165 feet from the point where the brakes were applied to where the trailer had rested. That was still north of the intersection of the private driveway where Mr. DeSanto made a left-hand turn.

Q. Can you tell us who owned the truck carrier?

A. The carrier had been owned by the Auto Forwarding Company, Room 212, 200 East Avenue, Rochester, New York.

Q. What make of trailer was it?

A. It was a Francis semi-trailer.

Q. I show you Plaintiff's Exhibit 3G and ask you whether you can identify the type of trailer that was used.

A. It was on the type of this one here (pointing to model DE)—that is the type.

Cross Examination

BY MR. McNEES:

Q. Was any part of the front Packard car over the cab of the convoy, do you know?

A. As I testified here, both those cars had been off. However, all the tracks, as I assume, had been towards the tractor, they were.

Q. You couldn't tell whether the car, when it was carried on the convoy, was over the cab or not?

A. That I couldn't testify to.

Q. And did the tracks which you saw on the highway indicate a proper handling of the convoy under the emergency?

A. That I wouldn't say. They were probably due to the—the two tracks which I found were to the centre of the centre line, that is, over to the left of the centre line, and they were swerving to the right. That would indicate to me that the truck had been driving to the left of the centre line at the time when he applied the brake.

Q. Now, would the relation of the two trucks at the time of the accident indicate that the convoy carrier might have been pulling to the left to pass the truck in front of him?

A. Yes.

Q. And then decided he couldn't do it? He didn't do it, anyway, did he? He turned back to the right?

A. Yes.

Q. Did you see that the bank along there was just about a foot high? Do you remember that?

A. Why, this particular highway has a water drain and it is a swampy land, and you wouldn't call it an embankment. However, it is sloping to approximately a foot, possibly eighteen inches; just the wheels of the trailer and tractor were in that water drain.

Q. Were the marks which you saw on the highway caused by tires with brakes on?

A. Yes, sir.

Q. The tractor and the trailer were both sitting up level, when you saw them?

A. Yes, sir.

Q. How far ahead of the tractor was the Packard car which was off the top?

A. Why, the Packard car had fallen to the right of the trailer, and it was not thrown forward ahead, it was just thrown to the side.

Q. As you remember, it was almost directly off the right side where it had been carried?

A. Yes, sir.

Q. You don't know how it got over there?

A. No, sir.

Q. About what angle was the trailer sitting when you saw it? Was it leaning very much to the right?

A. Yes, there was a lean to it, to such an extent that the left side of the vehicle, we would say the tires rested on the improved portion of the highway, and the right side of the vehicle, the right side tires, were resting in the ditch. There was a ditch there of possibly ten or twelve inches.

Q. It wasn't down far enough, as far as you know, to give that angle?

A. That I couldn't say.

MR. KEITEL: We will call Patrolman Tama later for the purpose we have in mind.

MR. McNEES: If the Court please, may we ask the witness one question further.

Q. Can you tell us whether or not the fact that any cars had been carried on top of the trailer had anything to do with the accident?

A. That I couldn't say.

H. E. JONES, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Jones, where do you live?

A. In Elmhurst, Pennsylvania.

Q. What is your official occupation?

A. I am with the Lackawanna Motor Club, Scranton.

Q. In what capacity?

A. Secretary.

Q. I show you three photographs marked Defendant's Exhibits "V", "W" and "X" and ask you whether you took those photographs?

A. I did, yes.

Q. What do they represent?

A. Well, "W" was taken — no, I should say "V" was taken to indicate the straightaway on the highway to indicate there were no curves.

Q. What is this highway?

A. That is No. 611. These pictures were taken approximately three miles west of Tobyhanna.

Q. Now, what is "W"?

A. Well, "W";—really, I can tell you the pictures that I took but I don't know the detail work with them, as far as that is concerned.

Q. Well, that is all right. Just tell us what they show.

A. This was to indicate the condition of the berm.

Q. At the same location?

A. That's right.

Q. Now, what is this (indicating Defendant's Exhibit "X")?

A. And this indicates the position, as I understand it, where the car actually rested—or the convoy, where it stopped.

Q. Who is on that picture?

A. That is Officer Tama.

Q. The man who just testified?

A. That's right.

MR. KEITEL: We offer these exhibits in evidence, your Honor.

Cross Examination

BY MR. McNEES:

Q. May I ask you if Exhibit "V" was taken at the same place as Exhibit "W"?

A. No, "V" was taken approximately 400 feet from this sign here, this road sign. This one (indicating "W") was taken, I would say, within 75 feet of the same spot.

MR. McNEES: I wonder if you would withhold actually offering them until the other testimony is in? We would have to object to them as they are.

MR. KEITEL: All right.

J. J. TAMA, recalled.

Direct Examination

BY MR. KEITEL:

Q. I show you three pictures marked Defendant's Exhibits "V", "W" and "X". You heard Mr. Jones testify that he took these pictures, did you not?

A. Yes, sir.

Q. Were you with Mr. Jones when these pictures were taken?

A. Yes, sir.

Q. Now, what do they represent? Just tell us.

A. They represent the scene in Monroe Township, on Route 611, in which on August 17 the auto carrier had been involved in an accident.

Q. Referring to each picture—in the first place, did you investigate this accident?

A. Yes, sir.

Q. Is that you in Exhibit "X"?

A. Yes, sir.

Q. Now, as the result of your investigation, tell the Court what happened and refer to these exhibits.

A. Your Honor, Exhibit "V" is a straightaway and leads to the accident. The Chevrolet tractor and the Francis trailer were traveling towards New York on this straightaway. On this particular day there had been some Department of Highways workers fixing the berm just south of this straightaway, with the result that several cars were stopped and the auto carrier had to come to a sudden stop, which he was unable to do, with the result that he had pulled off the highway, which shows in Exhibit "W", pulled off to the right of the highway and ended up where Exhibit "X"—the officer there points to this particular location; that is where the front end of his trailer was stopped.

Q. Now, did this carrier have any automobiles over the cab?

A. Yes, sir.

Q. What happened to that automobile?

A. Why, the vehicle that was carried over the

cab went forward approximately three feet to the right of the tracks and rested on the cab. The front chain that was holding the front part of the vehicle, that was snapped, held, and the car was still in that position.

Q. Now, what caused this truck tractor to stop? Did it cause any obstruction?

A. What actually did cause it, there are boulders along this berm which it had struck, and in striking one large boulder had broken the right front wheel of the tractor and that caused it to stop.

Q. Now, how far was this boulder from the point where the carrier left the highway?

A. Relative to the highway or the position where he left it?

Q. On a straight line from the position where he left it.

A. Why, the marks on the highway showed that where this tractor had left the highway to the boulder was approximately sixty feet.

Q. And how far in was he from the nearest point on the highway? Do you know that?

A. I couldn't say.

Q. I refer you again to Plaintiff's Exhibit 3G and ask you whether you can identify the type of Francis trailer that was involved in this accident.

A. There isn't one there that type.

Q. I refer you to Plaintiff's Exhibits 3A; 3B, 3C, 3D, 3E, and 3F, and ask you if you can find the type on there.

A. No, sir.

Q. Was there a place for the car entirely over the cab?

A. Yes, sir.

Q. How many cars were hauled on the trailer?

A. Three.

Q. Three in addition to the one over the cab?

A. No, two in addition to the one over the cab.

Cross Examination

BY MR. McNEES:

Q. Do you know whether there was only one car on the trailer, two on the tractor, or how was it?

A. There was one on the tractor, and two on the trailer.

Q. Do you know who owned it?

A. Yes, sir, Russell Repman.

Q. Now, was that a type, then, where there was one car clear over the cab and no other car on the tractor at all?

A. There was no top deck on the trailer, just the one line of cars; that is, two cars and one over the tractor.

Q. Did the circumstances indicate that the driver had pulled over to avoid hitting cars in front of him?

A. That is what the circumstances did show.

Q. The car was stopped on the highway, on the right side of the road?

A. Yes, sir.

Q. Was there any other indication on the cab that you remember except just this name Repman, or was there any name on the cab?

A. There was a name on it, and it wasn't his.

Q. Do you know whose it was?

A. No; I don't.

Q. Was Repman the driver?

A. Repman was the driver.

Q. Do you know whether he was also the licensed owner?

A. Yes, sir.

Q. Do you know about how long it was after the accident that these pictures were taken?

A. These pictures had been taken in October, and the accident took place August 17.

Q. Neither the trailer nor the tractor upset?

A. No, sir.

Q. And no cars left the trailer or the tractor?

A. No, sir.

Q. Do you know whether anyone was injured outside of the driver?

A. My records show no one injured.

Q. Not even the driver?

A. No, sir.

Q. May I ask you whether you could tell whether or not the carrying of a car over the cab had anything to do with the accident?

A. From my experience, I should say yes.

Q. Well, now why?

A. Due to the fact that when this trailer had left the highway, the cab, due to the car being carried over, was not under complete control of the operator.

Q. You mean that the car being carried over the cab had something to do with it leaving the highway?

A. After leaving the highway, he could possibly have stayed within his proper distance to the right without running into the boulders.

Q. But, so far as leaving the highway was concerned, did that car over the cab have anything to do with that?

A. No, not there.

Redirect Examination

BY MR. KEITEL:

Q. Has there been any change in the ground at this point as shown in photograph Exhibit "W", from the way it was when the accident happened?

A. There has been no change.

Recross Examination

BY MR. McNEES:

Q. May I ask you if the grade is downgrade at that point?

A. That grade is downgrade.

FRANK SCHAUBLE, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Schauble, what is your occupation?

A. Photographer.

Q. Where are you located?

A. Erie, Pennsylvania.

MR. KEITEL: Before I examine this witness further, I want to offer into evidence Defendant's Exhibits "V", "W" and "X".

MR. McNEES: The only objection, if the Court please, we have is that we do not believe they are relevant or competent to prove anything but damages. We don't think they prove anything in the case.

MR. KEITEL: We believe they are relevant to prove the circumstances.

THE COURT: Well, the testimony may be irrelevant, but we will receive them subject to your objection.

Q. Mr. Schauble, I show you photographs marked Defendant's Exhibit "Y" and ask you whether you took that photograph?

A. I did.

Q. What is it a picture of?

A. A picture of a Buick sedan.

Q. Where was it taken?

A. It was taken at the Chevrolet Service Station in Erie.

Q. Now, I show you Defendant's Exhibit "Z" and ask you if you took that picture.

A. I did.

Q. What is it a picture of?

A. A picture of the same Buick sedan.

Q. As is in Exhibit "Y"?

A. Yes, same as in Exhibit "Y".

Q. Taken at the same place?

A. Taken at the same place.

Q. How does it differ?

A. Exhibit "Z" is a left front view of the sedan, and Exhibit "Y" is a front view.

Q. Now, I show you Defendant's Exhibit "AA" and ask you whether you took that photo.

A. I did.

THE COURT: Same car?

THE WITNESS: No, it is not the same car.

BY MR. KEITEL:

Q. What is that a picture of?

A. That is a picture of a tractor and trailer—convoy, I believe you call them.

Q. Where was that picture taken?

A. This was taken at 18th and Wallace, Erie, Pa.

Q. I show you picture marked Defendant's Exhibit "BB" and ask you if you took that picture.

A. I did.

Q. Where was that taken?

A. This was taken—Exhibit "Z" was taken on Route 20, approximately 12 miles west of Erie.

Q. Now when did you take these pictures?

A. Exhibit "BB" was taken March 16, 1936. Exhibits "Y", "AA" and "Z" were taken February 14, 1936.

MR. McNEES: If the Court please, we ask that all of the evidence of this witness be stricken from the record as having nothing whatever to do with the case, incompetent and irrelevant.

THE COURT: Well, at the present time, it is not, but it may have.

MR. KEITEL: We have not yet offered this in evidence and we expect to at the time when we can produce the witness to tie these photos into the case.

(At 12:25 o'clock p. m., court adjourned.)

(At 1:30 o'clock p. m., court reopened.)

PAUL W. DANIELSON, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Danielson, where do you live?

A. On Route 20, about ten miles west of Erie, Pa.

Q. What is your occupation?

A. Run a gasoline station.

Q. I show you Defendant's Exhibit "BB" and ask you if that is your gas station shown there on the picture.

A. It is.

Q. Has there ever been an accident involving a car carrier, an automobile carrier, on that stretch of highway near your gas station?

A. Yes, there has.

Q. When was such an accident?

A. I think about a year ago last March, but just the date, I don't remember.

Q. About what time of day was it, do you recall?

A. Around 8:30 in the evening.

Q. What was involved in that accident? What two types of vehicles?

A. Well, there was an automobile convoy carrier and a Buick sedan.

Q. Do you know whose automobile convoy carrier it was?

A. The M. and G. Convoy, Incorporated, I believe was the name of it.

Q. I show you Defendant's Exhibit "AA" and ask you if you can identify the object in that picture?

A. That is the convoy that was involved in that accident.

Q. What name is on the door of the parked car?

A. National Transportation Company.

Q. So that you would say that it was a truck owned by the National Transportation Company, is that correct?

A. Well, that is the information I had at the time, it was the M. and G. but I never looked at

that at the time. That is the first I ever seen the name on.

Q. I am showing you again Exhibit "BB". Is that where the accident occurred?

A. Yes, the accident occurred just about at the end of that car rail.

BY THE COURT:

Q. Where these people are standing?

A. Yes, just a little this side of that telephone pole, right there.

BY MR. KEITEL:

Q. Did you see the accident?

A. I didn't see the accident when it happened, no, sir.

Q. Did you hear the accident?

A. Didn't hear it.

Q. How soon after the accident did you arrive on the scene?

A. I was there about two or three minutes.

Q. Was the auto carrier loaded with cars?

A. It was.

Q. Could you tell from the surrounding circumstances whether there had been a car over the cab?

A. Yes, it was partially on the cab yet.

Q. How was it with reference to the runway?

A. The back of the car was to the front, on the ramp over the cab, evidently been carried there and when I got out there, it had moved forward until one of the rear wheels was resting on top of the Buick that collided with this transport, and the other was suspended in the air.

Q. Rear wheels?

A. Yes, rear wheels, the car was back in this direction (indicating).

Q. The car over the cab was facing in the opposite direction the cab was going?

A. Yes, sir.

Q. Now, were the wheels still on the runway?

A. They were.

Q. And was the car in substantially the same condition as in the picture here?

A. I would say about that, yes, sir.

Q. Now, did you notice whether the car on top was detached?

A. No, I did not.

Q. I show you Defendant's Exhibits "Y" and "Z" and ask you what that is a picture of.

A. I would say it was that Buick. I couldn't say positively but it looks like it.

Q. Was the Buick in the accident that landed on the roof in that fashion?

A. Yes, sir.

Q. Where was the rear wheel of the car that was being hauled over the cab?

A. Well, it was resting up possibly, just over the driver's seat on the top of the Buick.

Q. Do you know where they took the Buick after the accident?

A. No, I knew there was a towing company come and took it, but I don't know who it was; from Erie, I know.

Q. Was there any damage done to the Buick except over the windshield?

A. Oh, yes, the back of this Buick was injured, back where the clutch would be.

Q. Was anyone injured?

A. A man killed.

Q. In which vehicle was he?

A. In the Buick.

Q. Did you notice what state license tags were on the Buick?

A. I didn't, but I know that the man that was killed was from Cleveland, Ohio.

MR. KEITEL: If the Court please, we offer into evidence Defendant's Exhibits "Y", "Z", "AA" and "BB".

MR. McNEES: If the Court please, we should like to examine this witness further as to identification.

Cross Examination

BY MR. McNEES:

Q. It was after dark when this accident occurred?

A. Yes, sir.

Q. Did they take the carrier away before morning?

A. Yes, they did.

Q. The only time you saw it was between, say, 8:30 and 9:30?

A. Yes, along there.

Q. Now, you didn't see any name on it, did you?

A. No, sir, I didn't notice the name on it.

Q. How are you so sure that the car over the cab was pinned in this fashion? Do you remember that?

A. No, not that car being pinned; I don't remember that.

Q. Do you remember that the one wheel of the car was over the top of the other car, the wrecked car?

A. Yes.

Q. Now, can you tell us whether the car on the ramp was resting on top of the Buick or whether the wheel was over the end on top of the Buick?

A. The wheel was off the ramp on top of the Buick, but this here (indicating), as near as I can recall, would probably have accounted for that dent there in the front of the vehicle.

Q. So far as you know, it was the car shown in Exhibit "AA", in the rear, that made the dent in the Buick?

A. Yes, possibly. That would be my recollection, along about that, yes.

Q. How are you sure about the truck, showing in "AA", being the one?

A. I am not sure.

Q. You are not quite sure?

A. No, sir, it looks very much like it, but I am not sure.

Q. You don't know why you happened to say M. and G. today, when you got on the stand?

A. Yes, I was a witness in the civil case up there that was the outcome of this accident; that is the reason I know. This driver claimed ownership of the truck, but he was driving for the M. and G. Convoy.

Q. Now, are you sure that the Buick shown in Exhibits "Y" and "Z" is the one which was damaged?

A. I couldn't swear to that, no sir. They look very much like it.

Q. You didn't take that license number?

A. No, sir, I wasn't interested in whose car it was.

MR. McNEES: If the Court please, for the record rather than to prevent the Court from

having the pictures, I think we ought to object to their admission because they have not been properly identified.

MR. KEITEL: You are referring to "Y" and "Z" and "AA"?

MR. McNEES: Yes, I am referring to "Y" and "Z" and "AA" as not having been properly identified by the witness.

THE COURT: Have you any other evidence on that?

MR. KEITEL: No, we have not, your Honor. The witness has identified the scene of the accident. He said that the hauler was like the one picture and that the Buick involved was similar to the one picture, and that it was an Ohio man's car, and we felt that these pictures would aid him in identifying these various vehicles, but without the pictures he would have to go into great detail to do it.

THE COURT: Well, all he said is that it looks like it.

MR. KEITEL: Yes.

THE COURT: That is not very definite, is it?

MR. KEITEL: No, it could be more definite.

THE COURT: I think I will rule those pictures out unless you call witnesses hereafter to more distinctly and positively identify them.

MR. KEITEL: With your permission, I will examine the witness further as to the type of equipment that was involved. I understand then that "BB" is admitted and the other three pictures are rejected.

Redirect Examination

MR. KEITEL:

Q. I show you again Exhibit "AA". Is that or is that not the truck that was in this accident?

A. I couldn't be positive.

Q. Well, now, did the truck in the accident differ in any respect from this picture?

A. As near as I can recall, that is exactly the way the truck looked.

Q. What is there about this vehicle that you don't recall?

A. Well, there is nothing that I don't recall, only that this picture was taken by someone else and I don't know whether it was that truck or not, although it is similar or exactly the same kind of a truck, same type of truck.

Q. Was the truck in the accident damaged in exactly the same way?

A. Yes, it was.

Q. Would you say, therefore, that your failure to identify it positively is based solely on the fact that you did not take the picture and that the picture was not taken at the scene of the accident?

A. Well, I would say that, to the best of my belief, that is the truck, yes; as you say, I guess that is about the size of it.

MR. KEITEL: Your Honor, I believe that this witness is identifying this truck but he is just saying that, as a matter of positive, absolute certainty, he doesn't want to say that it is the same truck.

THE COURT: Well, do you say that is the same one that was in this accident?

MR. KEITEL: Yes.

THE COURT: Or one similar to it?

MR. KEITEL: No, this is supposed to be the same one.

THE COURT: Well, is it?

BY MR. KEITEL:

Q. Is this the one that was in the accident?

A. I wouldn't know.

THE COURT: That is rather indefinite, Mr. Keitel.

MR. KEITEL: Yes, I realize that.

Q. Mr. Danielson, what type of carrier was in this accident? Did it have the place for the car over the cab?

A. Yes, sir.

Q. How was the runway that the car of the cab supported?

A. With upright braces fastened, I suppose, to the frame of the car.

Q. Well, where were those braces located.

A. I couldn't tell you positively where they were.

Q. Do you remember whether they were in front of the cab, beside the cab, or back of the cab?

A. No, I don't.

THE COURT: You see, Mr. Keitel, this witness was there in the nighttime when it was dark. It will require some more proof than what we have to admit these pictures in evidence.

MR. KEITEL: What is that, your Honor?

THE COURT: I say it will require more proof than what we have to admit these pictures in evidence. You may be able to supply it.

BY MR. KEITEL:

Q. You have testified, I believe, the car that was drawn over the cab was thrown off?

A. It was thrown forward.

Q. What position was it in?

A. Two front wheels of the car which was toward the front of the convoy had gone over the ramp, and the one that landed on top of this Buick was in the wreck, and the front wheel was suspended in the air.

Q. From your observation, could you tell where the weight of the top of the cab was resting?

A. From my observation, I would say that the wheel on top of the Buick was sustaining the balancing weight, anyhow, of the car.

Recross Examination

BY MR. McNEES:

Q. Well, the wheel on top of the Buick had not made any dent in the top of the car?

A. No, it was an all steel car.

Q. Do you know what kind of cars were being carried on this convoy?

A. They were Packards.

Q. Do you know anything at all about the cause of the accident?

A. No, sir.

Q. You saw the damaged Buick after the accident?

A. Yes, sir.

Q. Will you tell us whether or not it was a good deal more damaged on the right side than it was on the top?

A. Yes, it was.

Q. The whole right side was pretty well crushed in, wasn't it?

A. The right side.

Q. Was it damaged at all in front?

A. The top slightly, yes.

Q. How about the bumpers, fenders and lights?

A. The impact came just about the front door of the car, it hit sort of sideways. The front end of the car—that is, really, the radiator and the front end was not damaged so bad; seemed to be along the side of the car.

Q. More the right side of the Buick that was hit?

A. Yes, sir.

Q. Which way was it moving?

A. It was moving in a westerly direction.

Q. And, of course, the carrier was then going east?

A. Going east, yes, sir.

Q. Normally, the left of the Buick and the left side of the carrier should have been together if they had a wreck, shouldn't they?

A. Yes, sir.

Q. Do you know where the carrier was when you saw it first, in relation to the road? Was it off—

A. It was diagonally across the road.

Q. Where was the front of it?

A. It was on the left-hand side clear up against the car rail.

Q. On the left side?

A. On the left side of the road.

Q. That is, facing toward Erie?

A. Yes.

Q. Did you see the men who were in the Buick?

A. There was just one man and I saw him in.

Q. Did you talk with him?

A. He was unconscious when I got there, and died.

Q. Was there just one driving the car?

A. Just one.

THE COURT: Let us understand, this Buick was not in this transport?

MR. KEITEL: No.

THE COURT: It was a car passing along the road?

MR. KEITEL: Yes.

Q. Could you tell from the situation as you found it whether or not the carrying of a car over the cab had anything to do with causing the accident?

A. No, I couldn't tell that.

Q. And could you tell whether the car carried over the cab actually caused any damage at all to the Buick?

A. No, I could not.

Redirect Examination

BY MR. KEITEL:

Q. Wasn't there a dent in the top of the Buick?

A. Yes, sir.

Q. Could anything else have caused that but the rear of the cab or the superstructure?

MR. McNEES: If the Court please, I think the witness has testified to that and I don't think Mr. Keitel ought to contradict him. I think the kink in the carrier was the thing that caused this damage to the Buick.

MR. KEITEL: Well, I think we have a right to examine further. We understood from this witness that he knew what these pictures were.

I believe you also raised this question in your most recent cross examination.

Q. There was a dent on top of the Buick, wasn't there?

A. Yes.

Q. What caused that?

A. I would say that the ramp, or the support of the ramp did it.

Q. And that is the car over the cab of the hauler?

A. Yes, sir.

Q. Now, was the support of the ramp interfered with in any way?

A. Well, the support itself, I couldn't say. I know this Buick was rammed right up there against the car or the support. Now, whether it was the support or the car the thing that actually damaged, I can't say.

Q. Do you recall whether the vertical support, that one up and down on the side, was injured in the accident?

A. No, I didn't notice, to that extent.

HARRY BAROFF, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Baroff, what is your occupation?

A. I am a commercial and newspaper photographer.

Q. Where are you located?

A. Scranton, Pennsylvania.

Q. I show you a picture marked Defendant's

Exhibit "CC" and ask you whether you took that photo?

A. I did.

Q. Of what is this a picture?

A. A picture of a car that came down over the Morgan highway and landed at the foot of the hill.

Q. Where is that location?

A. Morgan highway is located on the northern part of the City of Scranton, called North Scranton.

Q. Do you recall approximately when that picture was taken?

A. This picture was taken at 7:00 o'clock the following morning.

Q. Can you fix a date?

A. September 22, 1934.

Cross Examination

BY MR. McNEES:

Q. You know nothing about the wreck except that you took the picture?

A. That's all.

JOHN J. NORTON, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Norton, where do you live?

A. Keyser Avenue, Scranton.

Q. What is your occupation?

A. I'm unemployed at the present.

Q. I show you Defendant's Exhibit "CC" and

ask you whether you saw the original of which this is a photographic reproduction?

A. Yes, sir.

Q. Where did you see this?

A. I saw it at Scranton on Keyser Avenue.

Q. Did you see the accident happen?

A. Yes, sir.

Q. Can you identify whether the trailer was so constructed as to carry a car over the cab?

A. It looked like that kind of a car to me. It had a ramp on the cab in front.

Q. What happened to that car up over the cab as a result of this accident?

A. Well, it flew off. It was thrown to the side of the car.

Q. Can you point out which one was the one over the cab?

A. That one there (indicating the one to the extreme left of the photograph).

Q. And you would say that this picture is an actual reproduction of the scene that you saw?

A. Yes, sir.

MR. KEITEL: May it please the Court, we offer in evidence Defendants Exhibit "CC".

MR. McNEES: If the Court please, our objection to it is that it is in no way related to the carrying of the car over the cab. There is no evidence that that was the cause of the accident or that it aggravated any damage after or during the accident.

THE COURT: We will admit it subject to your objection.

Cross Examination

BY MR. McNEES:

Q. Do you know what did cause this accident?

A. No, sir, I don't.

Q. Did you say you saw it when it happened?

A. I saw it as it actually happened. I was about fifty-five feet away from there.

Q. This was on the Morgan highway?

A. At the bottom.

Q. Is it a bad place at the bottom?

A. Oh, I don't know. It depends on what you call bad.

Q. Well, it's bad enough to have a good many accidents there, isn't it?

A. Yes, sir.

Q. Was there any other car involved in the accident?

A. No, not that I saw.

Q. Do you remember what kind of cars they were carrying?

A. Dodge.

Q. Do you know how many?

A. Four.

Q. Now, do you know whether the front car was entirely over the cab or leaning up against the cab at the back?

A. I couldn't say.

Q. Had the convoy passed you before the accident?

A. No, the convey—I was standing about right here (indicating on photograph) and the convoy had the accident right here (indicating).

Q. It was going across your point of vision?

A. Yes, but it didn't come to me; that is, as far as I was.

Q. It didn't go past you?

A. No, sir.

Q. Was it coming toward you?

A. Well, kind of slanting.

Q. You can't think of any reason for it? Was it icy, slippery, or anything of that sort?

A. No, it was perfectly dry.

Q. Was the driver hurt, do you know?

A. I don't believe he was. He was right out of the cab after it happened.

Q. As far as you know, no one was hurt?

A. No; not seriously, anyhow.

Q. Is the location of the trailer in the picture off the highway somewhat?

A. Yes, that is in a garden.

Q. Did he go through a guard rail?

A. No, a garden.

ANTON VAN HOFF, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Van Hoff, where do you live?

A. 548 Hudson Street, New York City.

Q. How long have you lived there?

A. For the last two and a half years.

Q. Mr. Van Hoff, I show you a photograph marked Defendant's Exhibit "D". Let me first ask you whether you were ever involved in an accident at 144th Street and Broadway?

A. That's right.

Q. Is that a picture of that accident?

A. That's right.

Q. How were you involved in the accident?

A. I was coming up from the west side toward the east side—

Q. Well, were you in the other car?

A. I was in the automobile, in the Buick.

Q. Now, which is your car on this exhibit?

A. This one here on the floor (indicating).

Q. The bottom one, to the extreme left?

A. That's right.

Q. Now, after the accident, do you remember what happened?

A. After the accident, they had to knock the roof off in order to get me out.

Q. But do you remember what happened yourself?

A. I remember when he hit me.

Q. Do you remember anything after that?

A. When they took me out of the car.

Q. Were you seriously injured?

A. Not bad.

Cross Examination

BY MR. McNEES:

Q. What time of day was the accident?

A. Six o'clock in the morning.

Q. Were you the only person in your car?

A. That's right.

Q. What was the cause of the accident? You going one way and the other fellow another way?

A. He was coming downtown and I was coming from the west side to the east side.

Q. You were on 144th Street?

A. That's right.

Q. And the accident was at the intersection where the two streets cross?

A. That's right.

Q. Do you remember whether the driver of the truck was hurt?

A. No, he was not hurt.

Q. Do you know anything about the cause of the accident except that you both wanted to be in the same place at the same time?

A. No, I was crossing from west to east and he come down—

Q. Was his truck under control, as far as you know?

MR. KEITEL: May it please the Court, we think that that is beyond the scope of the direct. Our point is, not who caused it, but it did happen.

MR. McNEES: I think that's right.

THE WITNESS: You see, this is the centre of the street. There is like a park, one way going down and one way going uptown. According to this picture, I was almost over this street when he hit me, and then the car from the top fell off on my car. See, that's the car which was on top, this one here, right on top of the cab.

Q. I think you did say, but I am not quite sure, that the car shown in the picture is just as it rested after the accident, just the way it looked to you after the accident?

A. Yes, sir.

THE COURT: Upside down, was it, or nearly down over on its side?

THE WITNESS: Turned over, and this new Chevvy was on top of the cab here, and it

fell off on top of my car.

BY MR. McNEES:

Q. Now, what hit your car first? The front of the truck?

A. What was that?

Q. Was it the front of the truck that first hit your truck?

A. The front of the truck hit me, yes.

Q. And was the front of the truck hitting your car on the side what caused the damage that you can see here to the side of your car?

A. I have some other pictures here, maybe we can see more; that's where it happened. Then he dragged me over and this top car on top of the cab fell over on mine.

(The witness produced a picture which he used in giving the last preceding answer.)

THE COURT: Was this picture taken at the scene of the accident?

THE WITNESS: No, that is taken after.

BY MR. McNEES:

Q. Is it correct to say that the damage caused to the side of your car was caused by the front of the truck running into it?

A. And the turning over and everything.

Redirect Examination

BY MR. KEITEL:

Q. Was there any damage caused by the car over the cab landing on your car?

A. Yes, it smashed in the roof.

Recross Examination

BY MR. McNEES:

Q. Well, the car coming off the top of the cab

landed on the side of your car, not on the roof?

A. On this side, but it smashed in the roof. It wasn't none of those—

Q. Steel cars?

A. No steel car.

RUSSELL P. BREWER, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Brewer, where do you live?

A. At the Anvil intersection of Route 1 and State Route 52 in Chester County.

Q. Have you seen on the highways these vehicles designed for carrying automobiles?

A. Yes, many of them.

Q. Are you personally familiar with any accident in which one of those has been involved?

A. Yes, there was an accident at the Anvil corner on the evening of December 18 of last year.

Q. That is 1936?

A. 1936.

Q. Now, what was involved in that accident beside the carrier?

A. A Pontiac sedan, I recall.

Q. What type of a carrier was it? How many cars did it carry?

A. It carried three at the time of the accident, two inside the enclosed compartment and one on top.

Q. The one on top pratically or totally over the cab of the towing tractor?

A. Well, when I saw it, it was off the top. It had fallen off after the collision.

Q. Well, did you see the collision?

A. No, I heard it, but I didn't see it.

Q. What did you hear?

A. Well, I heard two distinct noises, like a crash, and I thought another car turned over. When I got to the scene, I found that the car that had been on top of the trailer had fallen off onto the highway.

Q. Do you know who owned the carrier vehicle?

A. The name on the side was Ford, that's all I know; and the driver told me he was carrying cars from Chester, from the Ford plant at Chester.

Cross Examination

BY MR. McNEES:

Q. Do you know what type of equipment was involved?

A. It was a trailer type—a tractor type. That is, the motive power was in the front, and the rear was like a trailer.

Q. Was it an open trailer, do you mean?

A. No, it was closed. The lower part was closed, and the two cars inside were entirely covered.

Q. Now, was it designed to carry two more cars outside on top, or just one?

A. Well, I assume that it was to carry two; I don't know exactly.

Q. You don't know, do you?

A. It looked big enough to carry two.

Q. That is, to carry them right on top of the trailer?

A. Yes, on top of the trailer.

Q. Then there wouldn't be any part of that car over the cab, would there?

A. I couldn't answer that.

Q. You didn't see the carrier before the accident?

A. No.

Q. Do you know anything about the cause of the accident?

A. Only what was brought out at the trial when there was a damage suit in Chester County.

Q. But you don't know, of your own knowledge?

A. Only from the testimony; I was there as a witness.

Q. There were Ford cars being carried?

A. Ford cars, yes, sir.

Q. Do you know how the top car had been fastened on?

A. No, I don't. I didn't examine that. I merely helped clear traffic or direct traffic at the time, in the emergency.

Q. Do you know whether the convoy was on a long trip or whether it was just hauling locally?

A. I don't know its destination. It was only eighteen or twenty miles from Chester City to that point.

Q. There was no ramp at all over the cab of the carrier in this case?

A. To my recollection, there wasn't any, because the tractor seemed separate, having turned at an angle.

Q. Did either the tractor or the trailer upset?

A. No.

Q. Were either of them off of the road or on the highway?

A. About right in the centre of the intersection.

Q. Was this what you call a right-angle collision, the one car coming one way and the other crossing directly across?

A. The crossroad is not a perfect right angle. U. S. Route 1 bears to the left on a forty-five degree angle, while the other road is ninety.

Q. Which direction was the Pontiac car moving?

A. It was moving from Kennett Square to Wilmington, which would be in a northeasterly direction at that point, but it was turning on the curve.

Q. And the carrier was moving which way?

A. The carrier was moving from Philadelphia to Chester, toward Kennett Square, in a southwesterly direction.

Q. Was the driver of the truck injured, do you know?

A. No, only very slightly; bumped his knee or something.

Q. Do you know whether the Ford car that you believed was on top of the trailer did any damage when it came over to anybody else?

A. No, it merely blocked the highway for a considerable time, but it cleared the other car, didn't damage it.

BY THE COURT:

Q. Where do you live?

A. At the Anvil, locally known as Longwood Gardens.

HENRY F. KING, sworn.

Direct Examination

BY MR. KEITEL:

Q. Dr. King, what is your occupation?

A. Automotive engineer.

Q. Where are you located at the present time?

A. At the Massachusetts Institute of Technology.

Q. What degrees or special training do you have that would make you qualified to testify concerning the steering problems confronting these carriers?

A. Well, I am a graduate of the Institute with three degrees in automotive engineering, am a holder of the Sloane Fellowship in automotive engineering, Sloane being the president of General Motors. I have been actively engaged in engineering work for eight years, acting as consulting engineer for some of the larger automotive companies.

MR. KEITEL: Do you wish any cross-examination on qualifications?

MR. McNEES: No, except as to his experience with this type.

Q. I show you Defendant's Exhibit "E" and ask you to state your experience with reference to such equipment and your scientific knowledge, if any, concerning what problems might affect the steering, if any, of that type of equipment.

A. I have no direct experience with a design of this type. I am forced to assume here that the element called the tractor was purchased and then this carrier is put on afterwards. To the best of my knowledge, the automobile companies as such—that is, the main sources of supply do not supply any such vehicle as this. Now, if we analyse this particular structure here I note that it is a Dodge truck, and we have a vehicle on it that is evidently a Plymouth automobile, and the centre of gravity of this Plymouth car is some place over the cab.

Now, supporting the platform on which this Plymouth rests is an upright member which is probably an angle iron, and it comes down and rests on the frame, forward of the cab. Now, at that point, or close to that point, passes through the steering box—that is the gear mechanism that transfers the rotary motion of the steering gear to a fore-and-

aft motion of a steering arm, and that in turn is connected to a track like that (indicating). In other words, in this whole structure, the weakest point in the chassis is the point where the steering box is attached to the frame. Now, from this picture, I have no method of knowing how that is attached, whether it is bolted or welded. If it is bolted through, the modulus of the channel member is decreased by the area taken out by the bolt holes or rivets. If it is welded and cross welded, it will only require to show a welding strength of eighty per cent. of the strength in the whole.

Now, what we find here is that, when the driver exerts an effort on this steering wheel, the front of the tractor will tend to deflect in proportion to the amount of taut exerted by the driver. That in itself may not be too serious except as you have to give a sudden wrench to the wheel; that is, if you drop your outside wheel off the concrete and have to climb one or two inches of concrete to get back on, your tendency is to oversteer the vehicle. That is, in order to get it back on, the force you exert on the steering wheel will deflect the front, and then when the front is straightened out, you will steer forward and you will probably travel farther out on the highway than you originally intended.

The next point, this being a Dodge truck, you don't know what the serial letters on this are, do you?

MR. KEITEL: It isn't in the testimony.

THE WITNESS (Continuing): It is a '37 truck, so it will probably be an MF series, I imagine. Well, whether it is an MF or MB, the angle of inclination of the kink pin is some place between eight and nine degrees. Now,

that means that when you steer this vehicle, as long as you turn away from a straight go-ahead position, you have to raise the front of the truck, due to the angle of inclination of the kink pin. Now, the more load you have on there, the harder it is to steer because the more load you have to lift, you have to lift this truck vertically through the air in order to turn the front wheels.

Now, the third point, as far as steering is concerned, is that with this vehicle on top of the cab, we have raised the centre of gravity of the load over what it would have been if the vehicles were in back of the cab. The side thrust in the front wheels for a given velocity and a given radius of turn is the function of the height of the centre of gravity; that is, the higher the centre of gravity the more load is thrown on the outside wheel. Now, assuming that the tires are strong enough to carry it and the axle is strong enough to carry it, we have a side thrust on the bottom of the wheel which is equal to the weight on that wheel. This is the coefficient of the friction between the wheel and the road which, under average circumstances, is about six tenths. Now, on a fairly rapid turn, the tendency is to roll the tire under—that is, towards the centre of the vehicle. Now, that brings about a point that is debatable between European and American engineers, in the effect of understeering and oversteering. An oversteered car means that when you put it into a turn, you have to exert force on the steering wheel to keep it from winding up tighter in the turn, but in an understeered car you

have to employ pressure to the steering wheel in order to keep it in that particular radius or turn. American engineers in general believe that the best road performance is attained with an understeering automobile. Now, this vehicle carried on top of the car, undoubtedly causing the outside tire to roll under, will change this from an understeer to an oversteer.

MR. McNEES: If the Court please, I think we have arrived at a point that will enable us to come out even. His testimony is very distinct in different groups, and if we could cross-examine on each point, I think the testimony would be more clear.

Cross Examination

BY MR. McNEES:

Q. As I understand it, your testimony thus far concerns the strength of the frames, the weight on the front wheels, and the centre of gravity. Now, as to the strength of the frames, isn't it true that welding any steel to the frame strengthens rather than weakens the frame?

A. No.

Q. You say that it weakens steel to weld other steel on it?

A. Yes, sir, because you have to raise the—shall we call it the virgin steel—we have to raise that to the melting point in order to get the two metals to flow together, and when we do that and it air cools we increase the grain size. Not only that, but we have pit marks from the action of the torch, and as the acids freeze the cracks start at the bottom of a hole.

Q. Well, that weakness, then is caused by a physical change in the structure of the steel?

A. Yes, sir.

Q. Ordinarily, if you weld two plates together, it is stronger than one plate, isn't it?

A. Well, that depends on the joint.

Q. Now, would you say also that the drilling of the bolt holes in a frame, where you bolt another piece of steel to it, weakens the frame?

A. Yes, sir.

Q. As to the next point, the question of the weight on the front wheels, your testimony in that regard would not affect the situation if there is a trailer or other weight on the rear of the truck which counterbalances the weight over the cab, would it?

A. Well, I don't see how you could put anything on the back unless it was attached behind the rear axle to take the weight off the front wheels.

Q. Well, now, the testimony was that if you take the car off the cab, that there is not sufficient weight for steering purposes?

A. That is perfectly possible, if the trailer attachment is behind the rear axle.

Q. It is obvious, I guess, that if we had the same push down as we have pull up, we have a balanced force?

A. Yes, sir.

Q. And you are not testifying here, are you, that the weight actually is increased on the front wheel?

A. No, sir.

Q. You are just saying what happens if it is?

A. If it is, yes, sir.

Q. As to the third matter, the question of the centre of gravity, would it make any difference as to the type of structure—that is, whether we had a

closed ordinary freight-carrying truck or an open car-carrying truck? If the centre of gravity is four feet high, the effect on the curves you speak about will be just the same, would it?

A. Well, you will have to bring out the other point of weight on the front wheels in order to make that. That is, if you had a carrier such that it had the same centre of gravity and the same relative weight on the front wheels, it wouldn't make any difference.

THE COURT: Proceed.

MR. KEITEL: I believe that is about all that we can cover here.

THE COURT: Would the excessive weight that apparently is on the rear axle, of having the car so far back, have anything to do with steering it?

THE WITNESS: No, sir,—that is, the front axle. Now, none of the points that I brought out there are such that they cannot be corrected.

BY MR. McNEES:

Q. May I ask if you ever knew a frame to break in a welding of one of these carriers on top?

A. No, not on this particular carrier, but we have had that in truck conditions. You will notice usually printed on the back chassis of a truck, "Don't drill any holes on top sill." You are supposed to drill them at the neutral axis, or use U-clamps around the frame and attach to the body that way.

Q. Do you know whether these tractors are sold to the car carriers for the purpose of building this frame on them?

A. No, I don't know that.

Q. Do you know whether General Motors sells tractors for this purpose?

A. I would doubt if they have that type of frame on it.

Q. No, I mean regular tractors to be used for this type of carrier.

A. Undoubtedly, they sell regular tractors, yes, but I doubt if they have that superstructure on the frame when they start out. I know they don't build them.

Q. But does General Motors sell to these car builders, tractors for that purpose?

A. Yes. As a matter of fact, if you are going to haul Chevies, you would better use General Motors. If you are going to haul Plymouths, you would better use Dodge.

Redirect Examination

BY MR. KEITEL:

Q. Dr. King, are these tractor units built different from other tractor units? In other words, are they specially reenforced as to the axles?

A. These particular units?

Q. Yes.

A. I don't think so. That is, you have a certain amount of leeway when you order a tractor. That is, they will allow you to pick truck sizes, and usually on a given model number they will allow you to pick wheel bases within a certain limit.

Q. Is a vehicle of the type shown on this exhibit any more difficult to steer than a large truck?

A. Well, I should say that this vehicle, carrying a total load, shall we say, of 6000 pounds, distributed in this way, would be more difficult to steer than if the 6000 pounds were in a box back on the chassis. Now, you can go two ways on that, of

course. You could put your 6000 pounds on the back axle and the first car that went into you would probably go over the road, because you have no axle between the wheels and the load. But the normal distribution of the load on a platform body, it would be easier to steer than if you put the 6000 pounds right on the front axle where it is here.

Q. If in turning it became necessary to slide the brake, would you have any additional difficulty?

A. Well, yes, the amount of weight that comes off the rear wheels and is transferred off of the rear wheels is the function of the height of the centre of gravity, so that the farther up the car load is in the air, the more weight you transfer on the front wheels.

Q. Is there anything about the concentration of weight in front that would make this type of vehicle difficult to deflect to the right or the left?

A. Well, probably the best answer to that is when you point an arrow, you always put the flag on the front and put the feathers on the back, if you want to travel a straight line. The more weight you have concentrated at the front, the harder it is to turn around the corner.

Recross Examination

BY MR. McNEES:

Q. And is the corollary true that the easier it is to keep it in a straight line?

A. Yes, the easier it is to keep it in a straight line, that's true.

Q. Now, you were not here when they testified that these accidents were caused on straight highways, were you?

A. I was here this morning.

Q. You wouldn't say, then, there would be any relation between the car over the cab and an accident caused on a straight highway, would you, except in favor of the car over the cab?

A. Well, if you had to make a turn on the highway, that is cross from one side to the other, we have those two factors there brought out. That is, the deflection of the front for a certain jar, and also the fact that you have more weight to lift due to the inclination of the kink pin.

Q. As to the centre of gravity, the lower the centre of gravity the safer the operation in general?

A. The lower the centre of gravity? No, there is a limit there.

Q. Is there?

A. Yes. We must have the weight transferred from the inside to the outside wheels, if we want to be able to go around a corner without sliding off the concrete onto the dirt. That is, we can get the centre of gravity too low.

Q. Can we get the centre of gravity too low in the ordinary truck construction?

A. Yes, from the psychology of the driver, it could be too low; that is, if the driver feels the body tip, he is apt to slow down. Now, the lower the centre of gravity, the less the body tips and the less he is liable to slow down.

Q. It has its effect on the human factor, then?

A. Yes, sir.

Q. May I ask if you know that most of the licensed trucks and tractors have that cab over the motor so that the load can be shifted forward?

A. Yes, sir.

Q. General Motors makes that type?

A. Yes, they do that from the standpoint of vision.

Q. And generally shifting the load forward, too, when they do that, don't they?

A. Yes, they shift the load.

C. P. MORRIS, sworn.

Direct Examination

BY MR. KEITEL:

Q. Mr. Morris, where do you live?

A. Washington, D. C.

Q. And what is your official occupation?

A. I am an examiner in the Bureau of Motor Carriers in the Interstate Commerce Commission.

Q. Have you at our request obtained from the files of the Commission certified copies of certain applications made by certain motor carriers?

A. We have portions of certain applications.

Q. Have you certified as to those copies?

A. The secretary of the Commission has so certified. It appears on the records.

Q. Will you please give us the names of the applications from which those portions were taken?

A. Square Deal Cartage Company, identified as Docket No. M.C.2765 in our records; F. J. Boutell Driveaway Company, identified as Docket No. M. C. 3468; Krout's Convoy, identified as Docket No. M. C. 14485; Howard Sober, Inc., identified as Docket No. M. C. 8989; Pontiac Auto Transport Company, identified as Docket No. M. C. 66981; and M. & G. Convoy, Inc., identified as Docket No. M. C. 20722.

Q. Now, you have received this certified copy from the office of the Interstate Commerce Commission?

A. The secretary of the Commission, yes.

(The portions of the applications referred to by the witness were marked as Defendant's Exhibit "FF".)

MR. KEITEL: I offer in evidence the said certified copy of the portions of the applications as testified to.

THE COURT: Any objection?

MR. McNEES: We have no objection providing, if the Court please, we may bring in the rest of the applications if they seem to be relevant.

MR. KEITEL: I just want to ask the witness a question:

Q. Whether or not you know anything about this except that you are bringing them here?

A. No, just bringing them here, I made no examination.

Q. And whether or not you were subpoenaed to appear?

A. I was not subpoenaed to appear.

(Adjourned to Tuesday, December 2, 1937, at 10:00 o'clock a. m.)

I hereby certify that the proceedings and evidence are contained fully and accurately in the notes taken by me on the hearings of the above cause, and that this copy is a correct transcript of the same.

Grace M. Drayer,
William W. Wyant,
Official Stenographers.

The foregoing record of the proceedings upon the hearing of the above cause is hereby approved and directed to be filed.

FRANK B. WICKERSHAM,
Additional Law Judge.

Before Honorable Frank B. Wickersham, Additional Law Judge in Court Room No. 2, Harrisburg, Pennsylvania, Thursday, December 30, 1937, and Friday, December 31, 1937.

Harrisburg, Pa., December 30, 1937, 10 a. m.

Before Honorable Frank B. Wickersham, Additional Law Judge.

Appearances:

For the Plaintiffs: McNees, Hollinger & Nurick, Esqrs.

For the Commonwealth: Hon. Charles J. Margiotti, Attorney General, Hon. George W. Keitel, Assistant Deputy Attorney General.

For the Department of Highways: Lawrence Casey, Esq.

For the Department of Revenue: James D. McHugh, Esq.

For the Bureau of Motor Vehicles: Michael Donohue, Esq.

HAROLD P. BOSS, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

Q. Mr. Boss, where do you live?

A. Washington, D. C.

Q. What is your official position?

A. I am Official Examiner with the Interstate Commerce Commission, Bureau of Motor Carriers.

Q. What is the document marked Defendant's Exhibit GG; I ask you what that is?

A. This is exhibit filed with the application for appropriate authority to operate under the Motor Carrier Act.

Q. Are they certified copies?

A. This is a certified copy.

Q. Certified by whom?

A. Secretary of the Interstate Commerce Commission.

Q. From the applications of what companies are those pages taken?

A. From the Square Deal Cartage Company, Inc., F. J. Boutell Driveaway Company, Cartage Company, and Pontiac Auto Transport Company.

Q. Are there any sketches included in that certification?

A. Yes there are two sketches included.

Q. Referring to sketch marked No. 6991, which application was that sketch contained in?

A. That is Pontiac Auto Transport Company.

Q. Is that same sketch included in another application?

A. Yes, Baker Driveaway Company, F. J. Boutell Driveaway Industrial Transport, Inc., H. H.

Krout, Pontiac Auto Transport Company, Howard Sober, Inc.

Q. Referring to the other sketch, marked 2765, what applications contain that sketch?

A. Square Deal Cartage Company and E. & L. Transport Company.

Q. Now the sketches in the applications of these other companies are the same as these produced, E. & L. Company?

A. That is true.

Q. Have you examined those sketches?

A. I have.

MR. KEITEL: We offer Defendant's Exhibit GG in evidence.

THE COURT: Draw my attention to it at two-thirty.

Cross Examination

BY MR. McNEES:

Q. May I ask you if you were subpoenaed to come here or just sent here by someone in the Interstate Commerce Commission?

A. I was just sent here by someone in the Interstate Commerce Commission.

HOWARD MITCHELL, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

Q. Mr. Mitchell, where do you live?

A. Baltimore at present.

Q. What is your occupation?
A. Chauffeur.
Q. Chauffeur for what?
A. Quaker Motor Freight.
Q. What kind of equipment do you drive?
A. Chevrolet Tractor.
Q. Is that used to transport other cars?
A. Yes.
Q. What type is it at the present time?
A. It is a tractor—
Q. Are the cars on the trailer enclosed or not?
A. Enclosed, yes.
Q. Are all of them?
A. No, two on top.
Q. On Saturday, November 20, did you drive one of those tractors across the City Line in Philadelphia?
A. Yes.
Q. What type was that?
A. Carrying the car over the top.

THE COURT: You mean over the top of the cabin?

A. Yes, sir.

BY MR. KEITEL:

Q. At the time you passed over the City Line how many cars were on the vehicle?
A. One.
Q. Where was that being carried?
A. It was being carried back of the cab.
Q. How many cars is the vehicle equipped to carry?
A. Three.
Q. On the day that you made that trip where did you start from?
A. I started from Baltimore.

Q. Did you start with a full load?

A. Yes.

Q. What happened to the other two cars?

A. I left two off at the Chevrolet dealer in Prospect Park.

Q. Which two did you leave off?

A. I left the one back of the cab and the one on the trailer.

Q. The one that you had on when you passed over City Line, where was that originally?

A. What do you say?

Q. Where was the car that was on the tractor when you crossed the line on the load, when you started from Baltimore?

A. On top.

Q. Over the cab?

A. That is right.

Q. Why did you take the car off from over the cab?

A. Well to avoid getting tree limb scratches and in case there was a low bridge to avoid hitting the low bridge or tree limb scratches.

Q. Is there any reason for taking that off?

A. Well if is easier to handle.

Q. When you arrived at the Philadelphia destination?

A. That is right.

Q. Any other reason?

A. Well it makes it easier in traffic.

Q. It is easier to steer?

A. Well a little.

MR. McNEES: If the Court please, this is his own witness, we object to the question as being leading.

THE COURT: It is leading.

Q. Does the presence of one car over the cab affect the steering wheel?

A. Not any that you notice at all.

Q. The effect that it does have, what effect is that?

A. Well it isn't much effect to it, I mean that you experience any, you know just what it is going to do and it is no more than any other tractor.

Q. Did you tell Mr. McHugh that you took that car off the cab and put it in No. 2 position because it was easier to steer?

A. I told you it was easier to steer and handle, or that would make it just a little.

Q. State whether or not, the presence of a car over the cab had interfered with your vision with respect to red lights?

A. Occasionally I would pull up to red light a little too close and sometimes I would have to open the door and look out. That does not happen very often.

Q. You have said you are employed by Anchor Motor?

A. That is right.

Q. Is your boss in court today?

A. Yes, sir.

Cross Examination

BY MR. McNEES:

Q. After you left Baltimore you unloaded your truck on the way, you usually do when you come to the place you are going to leave cars?

A. Yes, sir.

Q. Do you know whether in Baltimore it was loaded with the cars placed for delivery where they

could be most easily delivered as you went along?

A. I loaded them myself.

Q. When you loaded it did you know where the cars were going to?

A. Yes, sir.

Q. And you knew the places which you were to reach first?

A. That is right.

ALFRED BAXTER, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

Q. Mr. Baxter, where do you live?

A. I live Upland, Delaware County, Pennsylvania.

Q. What is your present occupation?

A. I am employed at the present time by the Sun Oil Company in the delivery of petroleum products.

Q. Louder.

A. I am employed at the present time by Sun Oil Company at Marcus Hook in the delivery of petroleum products.

Q. Have you ever driven a truck?

A. I have driven several of them.

Q. What kind have you driven?

A. Do you want names?

Q. Well, I don't mean names, I mean what type.

A. Tank, that is tank type, carrying petroleum products, automobile carriers, freight carriers and lighter delivery truck.

Q. Were the automobile carriers that you drove designed so that a part of the car was over the cab?

A. Yes, sir.

Q. Of the other trucks that you drove how big were they?

A. Well they ranged from half ton or ten or twelve ton.

Q. Did you notice any difference in driving an automobile hauler from driving a larger truck?

A. Well the types that I have driven there is some difference, if you refer to the type of the car over hood.

Q. Yes I do, what is that difference?

A. Well, you have the car over the hood, therefore you would have pressure exerted on the front wheels which you do not have in the freight or tank truck, naturally there is a difference in the handling of the truck.

Q. What difference did you notice particularly in the handling of the auto hauler because of that weight over the cab?

A. Well in one instance on your crowned roads your weight leans over to the side of the road, naturally you had to counterbalance that weight and steady the other side, with the tank truck you don't have to worry with that much.

Q. Did you have any difficulty in steering?

A. Well there is some, I experienced some difficulty with that more than you had with the other trucks; due to the idea that there is a car over the hood there and you would have to be experienced so that you can cooperate with that over your hood there.

Q. You say that the auto haulers are difficult to steer for that reason?

A. Well they are, I would say yes, sort.

Q. Does the car over the cab make any difference with the visibility?

A. You couldn't see anything if you would pull right up to it, you couldn't see anything immediately above your head unless you get out of that seat and looked up to observe objects in front of you you would have to view them from a distance of eight to one hundred feet before you come to them.

THE COURT: That is true if there is no automobile on top of the cab, is it not?

A. No, I should think then that you would have a clear vision, you don't have the car over to obstruct your vision.

THE COURT: How does the car behind you obstruct your vision in front of you?

A. I believe they are speaking of a car out over the front of the cab. Isn't that what you are speaking of?

Q. Yes.

THE COURT: You have a roof on the cab anyhow, do you not?

A. Yes, you do, your Honor.

THE COURT: Then how does the automobile on top of that roof obstruct your vision?

A. Your Honor, the automobile extends four or five feet beyond the windshield of the car.

THE COURT: All right.

BY MR. KEITEL:

Q. Does the presence of the car over the cab interfere with your vision of objects other than red-lights?

A. Well from the objects, you can't view them from immediately underneath them, you must view

them from a distance of eighty to one hundred feet before you approach them.

Q. Would that make any difference in the method used of driving?

A. Well I don't quite understand how you mean that.

Q. Would you go faster or slower or to the center of the road or side of the road?

A. That all depends on the driving conditions. If there was a light you would either stay in your own position on the road or if you knew it was there you would naturally veer out to get around an obstruction.

Q. Have you observed other haulers in your travels over the highway?

A. Yes, I have. You mean have I seen others?

Q. Yes.

A. Yes, I have seen plenty of them.

Q. Do they always have a hood on the vehicle?

A. Well the majority of them do but the other types of trucks in the company I work for I noticed several of those that had part loads being delivered.

Q. When they had a full load how would they load it?

A. If they started from the starting point they would naturally go out with a load in a particular place, but with the open type of truck, of which we are speaking, you would naturally, if possible, bring your car down from the above position to a lower level.

Q. Why would you do that?

A. Well you would not have to then worry about overhead objects, you could feel safer going along.

Q. Why would overhead objects worry you with a car over the cab?

A. If you damaged the car or anything it was up to you to pay for it.

Q. Could you see the overhead objects?

A. If you had seen the overhead objects you would naturally have to get on the other side of the road or probably get into somebody else's way.

Q. Did you ever do that?

A. You couldn't make as much time.

Q. Did you ever do that?

A. Oh, yes.

THE COURT: Are not the automobiles covered now with a covering?

A. Yes, your Honor.

THE COURT: They are not so likely to get scratched?

A. Not with light limbs, your Honor, but if you were inexperienced and would hit a heavy limb or heavy obstruction you would damage it, whether the cover was on or not.

BY MR. KEITEL:

Q. With a car over the cab in such a position as to obstruct your vision, as you have testified, would you be able to tell accurately whether or not you would hit a tree if you saw it down the road?

A. I should imagine. I shouldn't say I imagine; after driving one of those trucks for a while you become accustomed to the height and you can clear an object, but I have in my own driving more or less gave myself the benefit of the doubt and took plenty of room.

THE COURT: Did you ever drive to Reading with a load?

A. Yes.

THE COURT: Do you remember that tree with the limb extending across the road, not very high?

A. I do your Honor.

THE COURT: I was wondering how you would get around that limb?

A. You would have to go to the other side of the road or clean off the road to get around it.

Cross Examination

BY MR. McNEES:

Q. How long has it been since you were driving an automobile, convoys?

A. I stopped driving in November of 1935.

Q. What type of truck did you have when you were driving last?

A. At that time I drove a four car—

Q. Did that have a car entirely over the cab?

A. No, sir, that carried two on the lower level and two on the upper level, completely on the trailer.

Q. There wasn't any over the cab?

A. No.

Q. When was the last one that you drove that had a car over the cab?

A. That was in 1933.

Q. Was that car entirely over the cab?

A. That car was entirely over the cab.

Q. How long did you drive that car?

A. Well I drove for a period of seven months that type of track.

Q. Did you have any serious accidents with it?

A. No, sir, I didn't.

Q. As a matter of fact, you didn't have any accidents at all with the truck?

A. No, sir.

Q. Now is it correct that you would always prefer to drive with your load low in any kind of truck?

A. I would prefer it at any time.

Q. The trucks you are driving now, do you have a full four-wheel trailer on the back?

A. No, sir, I have a semi-trailer.

Q. Will you tell us whether that is one of those tanks that is underslung or the higher tank?

A. It is what we call a semi-underslung, the forward part sets up and the rear compartments are underslung.

Q. They are separate compartments?

A. Yes, they are.

Q. If you were hauling a load on that truck you would rather carry it on the low compartment?

A. Unfortunately we don't have a choice in the matter, the way we sell our products there is no choice to it.

Q. I think you said you moved the cars off the top?

A. Yes.

Q. Partly because you didn't want the load there—is it correct to say that you didn't want cars on the top with none down below to balance?

A. No I wouldn't attempt to haul a trailer with a car on top and none down below.

Q. So when you took cars off below you took no chance?

A. Yes, sir.

Q. Do you know whether the one you drove was well within the legal limits?

A. Yes, it was.

Q. So that limbs, if there were any, were in the way of any truck of legal height?

A. I would say they were.

THE COURT: What is the legal height?

A. I believe it is 14 feet in Pennsylvania, your Honor.

THE COURT: Do you remember the height of the underpass near Clarks Ferry on the Susquehanna Trail?

A. You mean the underpass right this side of that? Yes, that underpass is marked twelve foot four, I believe, because I got stuck underneath there one day.

THE COURT: I was going to say, twelve feet.

Q. You did a good deal of driving in Pennsylvania within the year, you are doing that now for the Sun?

A. Yes, sir, Pennsylvania and Delaware.

Q. Did the car over the cab have any tendency to make you be more careful when you were approaching traffic lights?

A. Well, yes, it did, you naturally lay back and view your light, if you come up on a light and the light was directly in front of you it would be impossible to see it and you would then have to step out of the car to see the light.

Q. It is true in the truck you are driving now and even in the higher cars, you can get too close to these lights to see them?

A. There is a point that you cannot view the light that you very near have to go underneath the light.

Q. The statement you make about this convoy is that this was back farther?

A. You would have to view the light from farther back, due to the car being out in front of you.

Q. The cars you figure eight to one hundred feet would be far enough?

A. I would estimate somewhere around that, yes. Of course you could view it a little closer than that.

Q. Did you yourself think they were any less safe than any other trucks that you were driving?

A. I feel myself if a man is not well skilled and well experienced that that was rather difficult for him to handle, that particular type.

Q. You think experience is a little more important in driving that kind of a truck than any other kind?

A. I would think.

Q. You wouldn't say it is more important than you would with driving a truck with a full trailer?

A. What?

Q. You wouldn't say that you need more experience in this than you would in driving a truck where you have a full trailer back, isn't that a rather touchy procedure?

A. Well, it is, yes, it isn't everyone that can handle a semi-trailer. Not that I am praising myself, or anything, but due to the car being overhead you more or less have to know how to counterbalance that weight when you are driving along.

Q. Have you had any experience with four wheel trailers?

A. Yes, sir.

Q. Now have you formed any opinion as to whether it requires as much care and as much experience to properly handle a truck with a full

trailer as it would to handle one of those motor convoys on a semi-trailer?

A. Well it does require a little experience and you have to allow for much more room in making your turns and one thing and another.

Q. Would it be true that in icy weather, or on slippery hills, you have more difficulty with the full trailer than you would have with a motor convoy?

A. In very bad weather there are very few companies would attempt to operate a full trailer.

Redirect Examination

BY MR. KEITEL:

Q. What do you mean by full trailer, what type?

A. Such trucks as tractor, semi-trailer and trailer, and there are such trucks as a six-wheel truck with a trailer.

Q. Is that type of equipment used in Pennsylvania today?

A. Well yes, a full trailer is solely upon its own wheels, a semi-trailer carries a part of the weight on the tractor.

Q. When you were speaking about a full trailer equipment how many units did you refer to?

A. Well, what they call a train, there are three pieces, just the truck and trailer has two pieces.

Q. Are they used?

A. Yes they are.

Q. Would you say that the troubles in steering a vehicle with the car over the cab are the same troubles as those that you meet in driving other vehicles?

A. Well in driving other vehicles you don't have that overhead weight to more or less contend with.

HARRY EDWARDS, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

Q. Mr. Edwards, where do you live?

A. Chester, Pennsylvania.

Q. What is your present occupation?

A. Unemployed.

Q. Did you ever drive a truck?

A. Yes, various types.

Q. What different types did you drive?

A. Light delivery trucks, trucks used—them tractors, and these automobile carriers, gasoline tank, the trailer unit.

Q. Did you ever drive an automobile hauler with a car over the cab?

A. Yes, sir.

Q. Completely over the cab?

A. Yes, that is right.

Q. Did you notice any difference in the operation of that type as against other types of cars?

A. Well my first trip with it, I didn't have a whole lot of it; I was of course with that particular type experienced, and I handled it rather gingerly, you may say, or with kid gloves, it didn't handle, in my opinion, like the equipment I had been driving.

Q. What difference did you notice?

A. Well it first gave me the impression of being somewhat topheavy, that is my first impression of it, and the operation of it didn't compare with other types of vehicles I had been driving, in my opinion.

Q. Was it easier or more difficult to operate?

A. Well it seemed to be more difficult, for the

simple reason that it seemed to be a whole lot of the weight up there on the front, there was slower response on the steering of it.

Q. How did the steering operate?

A. Well it seemed to be, that is while the truck was loaded, it seemed to be a lot of weight there and there was a slower response. In other words, I would make an effort on the steering wheel and it wouldn't respond as quickly as it would, as I found out later, when the truck was empty, or with the other types of trucks I had been driving, either loaded or unloaded.

Q. Did you experience any difficulty with vision?

A. That is when the truck was loaded I did.

Q. What difficulty?

A. On account of the overhead vehicle over the cab extends out so far, my vision was obstructed, that is, if I wanted an overhead vision. Of course if I would want vision on an outer line there was no obstruction there, but I am referring to an overhead vision.

THE COURT: You have that when there was no automobile on top of the car?

A. No, because the automobile extended out.

THE COURT: It didn't extend out beyond the cabin?

A. Yes, it did.

THE COURT: What supported it? It didn't hang up in the air?

A. There was a runway from this part of the cab and it had braces.

BY MR. KEITEL:

Q. How does the obstruction of the overhead vision affect your driving?

A. Well just what do you mean?

Q. I should say how did it affect your driving when you were driving this equipment?

A. These overhead obstructions might be—they were mostly trees, of course there were other obstructions from time to time, such as low traffic lights and the thing of it was you had to observe these obstructions from a distance, that is, you couldn't judge within—that is, at least I couldn't judge within two or three inches of the exact height of these obstructions, and therefore I would drive out to my left in order to clear them rather than to take any unnecessary chances.

Q. In other words, you couldn't from a distance judge the exact height that they would be when you got under them.

A. No, not exactly, not right up to the inch I couldn't, but as I say, while they might have given me two or three inches clearance I would take the chances and I would pull out. Well, a lot of times that would cost a lot of extra time on my trip, where if I had clearance and I knew I had clearance all the time I could have drove on my side of the road and made better time a lot of times.

Q. Then you did at times drive on the lefthand side of the road?

A. I will be frank, the biggest part of my trip was on the left of the road, because I wasn't familiar with that type of truck, it wasn't my regular truck.

Q. Did you experience any difference in the steering of this type of equipment with a car over the cab, as compared to other types?

A. There was a difference to me, that is, there seemed to be a difference to me, there was a slow response, as I tried to say before.

Q. Where was that slow response?

A. In the steering, like if I was to make a turn or make a good effort on my steering wheel, either to the right or left, in order to bring that back on the street line again I had to exert a noticeably more effort on the steering wheel than I would with the other type of vehicle.

Q. Have you observed the loading of the vehicle?

A. Yes, sir.

Q. Did you observe anything out of the way, any accidents, anything of that sort?

A. Well the only thing that I noticed, this would be an accident in the loading of it, that wasn't in an accident on the highway, it was in the loading, and this thing I have seen,—it dropped off a runaway.

Q. A runaway over the cab?

A. No, that is on a semi-trailer. You see these cars were run up on a semi-trailer, with skids and these runaways were possibly,—maybe five or six inches wide, six inches wide, and I seen a car on a couple of occasions drop down off of these runaways.

Cross Examination

BY MR. McNEES:

Q. About how long did you drive convoys with a car over the cab?

A. I have only made one trip that I recall of any mileage, and one trip from Chester to Philadelphia, one trip approximately 100 miles each way.

Q. You felt a little slower response, you say,

because of a load over the cab; did that cause any more dangerous operation?

A. Well I handled it more carefully, of course I tried to handle it carefully at all times but there was a perceptible difference in the operation of that vehicle from the tank type.

Q. So that, if anything, you operated it more carefully than you did the other?

A. Well I don't know whether that was more carefully or not, I tried to operate them more carefully.

Q. Yes, but you said something about on this first trip you were careful, that you hadn't had any experience before?

A. That is right.

Q. Wouldn't that be true changing from a light type vehicle to a heavy type vehicle, you would handle it the same way?

A. I wouldn't say that.

Q. Didn't you feel any difference even in passenger cars, say between a Ford and a Cadillac?

A. Time and time again I stepped out of a pleasure car and stepped into a heavy-duty truck, stepped right out of a pleasure car into a heavy-duty truck and taken it out on a trip.

Q. But you did notice a difference?

A. There was a difference of course from the pleasure car.

Q. And you had to handle it differently?

A. Naturally, but I was referring—you wouldn't compare a truck with a pleasure car, I was just referring to various types of trucks before when I said there was a difference in the operation of this one type.

Q. What were you driving just before you went on a convoy?

A. Pleasure cars right before that. That is, pleasure cars and occasionally new trucks.

Q. Not seeing quite so well overhead causes you to be more careful or less careful?

A. Well you make an effort to be more careful and I think taking it all in all it creates a lot of careless driving, even though you don't mean to do so.

Q. You think the fact that you don't see a traffic light but you pass say the 100 foot mark, would make you approach the traffic light with more care or less care?

A. Well if a traffic light would be at a crossing intersection, you cannot bring the vehicle to a stop 100 feet from an intersection and you were watching for the light to change, you have to pull up to the intersection especially if it would be in town, regardless of whether you see that light or not.

Q. No matter what you are driving, you know what the traffic light, what the color of the traffic light is before you get to the 100 foot mark, don't you?

A. Yes before you get to the 100 foot mark, yes, sir.

Q. Isn't it true that the only effect of this would be to make you drive more carefully?

A. As I tried to say, it might tend to make you drive more carefully, but at the same time on account of not having a clear overhead vision, there are times when I pull out of my line of traffic into the left because I don't feel as though I had clearance and therefore if there would have been an officer following me he might construe that as reck-

less driving, for the simple reason that oft times there was oncoming cars.

Q. You only drove this one truck?

A. Yes, but that was around 200 miles, probably.

Q. You were put on that truck without experience to drive 200 miles?

A. I was an experienced trailer driver but not that particular type.

Q. What you say about overhead obstructions does not apply to traffic lights?

A. No, I came across many traffic lights where I couldn't even clear traffic light.

Q. At intersections?

A. No.

Q. Where would it be?

A. I have seen traffic lights along the highway in several small towns, I can't recall the towns, but I can get the locations of them, if necessary, where they are hung out on a pole on an arm, and those lights were not a bit over ten feet high.

Q. Were you supposed to run under them?

A. If I was to keep on a straight right road there.

Q. They were out over the highway?

A. Out over the highway.

Q. All the trucks you drive were more than ten feet high?

A. I wouldn't say all of them, any truck ten feet high or more would have to clear those lights.

Q. You would not have to do the same thing with a lower truck?

A. That is with those high trucks, that is right.

Q. You have had a good deal of experience driving ordinary trucks?

A. Yes, I have, driving ordinary trucks.

Q. Isn't it true every time you shift the load you have a different experience at the wheel, if you have the load on the back or front, it makes some difference in driving?

A. On the steering of it, whether my load is in the front or the back?

Q. Yes.

A. No, not if the load is stationary load, that is, if the load will not shift, I wouldn't say it does. If a motor cargo and I was making deliveries I would load more to work deliveries, if the cargo were sand or something heavy, or bulky, of course it would be loaded evenly, or distributed evenly, if it was one heavy piece of freight I would put it up in the front of the truck.

Q. If you would put it in the back it would make some difference in the operation of the truck?

A. Well it might on certain trucks, it might all depend on what the load was and the wheel base of the truck, because it would ride there better than it would in the rear, that is, the freight would ride there better.

Q. So that on any truck the matter of the location of the cargo does have some effect in the way it rides?

A. That would all depend on the weight of the cargo and the nature of the cargo.

Q. The cargo you drove had a car completely over the cab?

A. That is on that trip I am referring to.

Q. That was in Pennsylvania?

A. Yes, that is right.

Redirect Examination

BY MR. KEITEL:

Q. Did any truck that you ever drove have the vision obscured to the same extent as the auto convoy that you spoke of?

A. No, sir.

Q. Did it have any part of the vision obstructed by overhead?

A. No, not by overhead.

Q. You talked about a trip from Chester to Philadelphia, was that a complete trip in itself?

A. That was a complete trip in itself.

Q. What were you hauling on that trip?

A. Three new cars.

Q. What make?

A. Ford cars.

Q. Where did you get those?

A. Chester.

Q. Were they manufactured there?

A. That is right, assembled there.

Q. Did you deliver them in Philadelphia?

A. In Philadelphia.

Q. Where did you deliver them?

A. To the Ford dealer in West Philadelphia.

Recross Examination

BY MR. McNEES:

Q. I understood you to say that you never saw an accident with a convoy on the road, is that right?

A. No I don't say that I ever seen any accident.

Q. You did see an accident or two where the car dropped off the runaway?

A. That was on a truck loading.

Q. In every case that was on a low runaway, not on the highway?

A. Low runaway.

Q. Did you see the Van Seiver truck come into Philadelphia?

A. Several from Camden.

Q. Have they load or truck above extend as far over the cab as that every time?

A. There was one car I seen has that obstruction to the same extent.

Q. Have you seen the Van Seiver furniture trucks?

A. I have seen various, but I didn't see the same obstruction on the trucks.

Q. About how far is it from Chester to Philadelphia?

A. About 18 miles.

Q. Will you tell us where your 200 mile trip was?

A. Chester to Palmerton and Lehighton.

Q. That is, it was 200 miles a round trip?

A. That is right, approximately.

Q. Came back empty?

A. That is right.

LEROY MARSHALL, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

Q. Mr. Marshall, where do you live?

A. Chester, Pennsylvania.

Q. What is your occupation?

A. Truck driver and crane operator.

Q. Have you ever driven an auto hauler?

A. Yes, sir.

Q. Have you ever driven other trucks?

A. Yes, sir.

Q. Did you ever drive an auto convoy with a car partially over the cab?

A. Well, the car itself was resting on semi-trailer and the back wheels and a bumper and part of the drive would be over the cab.

Q. You have heard the three witnesses testify about the difficulty of operation, have you not?

A. Yes, sir.

Q. Did you experience any such difficulty?

A. Well on various roads I experienced difficulty with it, that is the high-crowned amacite road was a hard road to drive on, it has an inside pull on the road.

Q. Was that inside pull more or less on a curve?

A. It would be much more on a curve.

Q. Did you ever have any trouble with the lights with your equipment?

A. It was inspected by some organization, I don't know who, when it was empty they put three cars in it and as run on the low lights, because the high lights went up in the trees and the next time I reported it and it was changed.

Cross Examination

BY MR. McNEES:

Q. When was the last time you drove a convoy over the road?

A. About June 1936.

Q. Four-car or three-car?

A. Four-car.

Q. You say you had the same difficulty with weight and steering that has been testified to?

A. Well I would say I imagine you call it gravity, pulling off the high-crowned roads.

Q. In your case there wasn't any weight over the cab at all?

A. No, sir.

Court Adjourned at 12:20 P. M. Until 2:30 O'clock, P. M.

Harrisburg, Pa., December 30, 1937, 2:30 P. M.

ISRAEL KERSON, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

Q. Mr. Kerson, where do you live?

A. Harrisburg.

Q. What is your official position?

A. Supervisory Title Clerk, Bureau of Motor Vehicles, Department of Revenue.

Q. Have you checked over the list of plaintiffs in this case?

A. Yes, I have.

Q. Have you checked over the ones that are registered in Pennsylvania?

A. Yes, I have.

Q. Have you prepared a list showing the different kinds of trailers owned by these plaintiffs?

A. Yes, sir.

Q. Where did you get the material on the list prepared by you indicating the type of trailers those are?

A. Filed in the records of the Bureau of Motor Vehicles.

Q. What particular records?

A. Alphabetical registration records?

Q. Of trailers?

A. That is right.

Q. I show you Defendant's Exhibit HH and ask you whether that is the list prepared by you?

A. Yes, sir, that is the list.

MR. KEITEL: We offer this Exhibit "HH" into evidence, your Honor.

THE COURT: Any objection?

MR. McNEES: If the Court please, we should like a statement indicating the purpose of it. We are not quite able to understand it.

MR. KEITEL: This Exhibit shows that these different plaintiffs have trailers of various makes, there is a recapitulation on the second page of it. Our purpose in introducing it is to show that in addition to the two trailers made by Francis they have trailers of Whitehead and Kales and other concerns, and also Homeade trailers. The plaintiffs have limited their testimony concerning the manufacture of these trailers to those made by Francis and we feel that this is admissible to show that there are many other types involved in addition to those.

THE COURT: In use in Pennsylvania?

MR. KEITEL: Yes, your Honor.

MR. McNEES: If this is to be followed by evidence that the other types are different we have no objection, but if it is not to be followed by that we think at least the inference would be incorrect and that it ought to be followed by

some evidence showing the construction of the other types.

MR. KEITEL: We do not propose to follow this with any evidence. It was merely to show that the plaintiffs have not completely demonstrated the type of equipment in use and that was our sole purpose of offering it.

THE COURT: We will receive it subject to your objection.

Q. Mr. Kerson, I show you a picture marked Defendant's Exhibit N, which has previously been introduced into evidence, and call your attention to license plate 37 Pennsylvania Truck V1A57; can you tell from your records the kind of equipment used in this particular vehicle?

A. Yes, sir.

Q. Will you please do so?

A. That is 1937 Dodge Truck, Model MH48.

Cross Examination

BY MR. McNEES:

Q. May I ask you on that Exhibit "HH" what the number of dealer's tags means?

A. That one particular convoy had dealers registration. This fellow H. H. Krout has 28 sets of dealers registration plates. In other words, he is a dealer in motor vehicles.

Q. Does that statement or figure have anything to do with the convoys carrying cars over the cab?

A. No, that has nothing to do with that.

Q. And that is equally true of the figure "5" on the second page under the Paul Snyder Equipment?

A. That was just to indicate that some of these

outfits did have registration plates and were using them.

Q. Those plates are not used on any of the equipment used in the first column?

A. I don't know whether they are or not.

Q. They are not for that?

A. There are occasions when it would be used that way.

Q. Do you mean legally?

A. That is right.

Q. Do you know anything about the construction of these trailers?

A. No, I am not familiar with that.

Q. You don't know, for instance, how near a Kingham trailer is to the construction of Whitehead & Kales or any other?

A. No, I couldn't testify to that.

Q. Will you tell us, if you did not, where you got the list of the persons? Who made the search, was that just given you by counsel or some other person on the other side?

A. No, I prepared that myself.

Q. You were in court, where did you get the names?

A. The names were given to me.

Q. By counsel?

A. That is right, to check.

Q. You made search against those whom you were asked to make it against?

A. That is right.

Redirect Examination

BY MR. KEITEL:

Q. Do you know whether these dealers' tags are issued to persons engaged in the convoy business?

A. There are cases where dealers' tags have been issued to persons engaged in the convoy business where they were actual dealers in motor vehicles and were delivering cars to their own places of business. Now there were several instances of that kind where a dealer would have one of those convoys and would go out and deliver his own cars to his place of business, which would be a legal operation.

AUGUST ULMANN, JR., having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

Q. Where do you live?

A. Narberth, Pennsylvania.

Q. What is your occupation?

A. I am instructor of experimental engineering at the University of Pennsylvania in Mechanical Engineering.

Q. How long have you been so engaged?

A. 17 years.

Q. What education have you had in mechanical engineering alone?

A. I am a graduate of Columbia University with a Degree of Mechanical Engineering and had a further Degree at Pennsylvania, Master of Science in Mechanical Engineering.

Q. What experience have you had in that line?

A. Well I have been a practicing engineer for 29 years and in a great many branches of engineering, and particularly mechanical, and I have taught seventeen of those years at the University of Pennsylvania and have also been at the same time Con-

sulting Engineer in this district. I am a Registered Engineer of the State of Pennsylvania.

Q. Are you familiar with automobiles, combining the carrier automobiles?

A. I have seen them in operation, yes.

Q. Have you seen such carriers with the car over the cab?

A. Yes.

Q. Have you made a study of the effect of the car over the cab with respect to certain physical behavior of hauling vehicles?

A. I have, yes.

Q. As a result of that study which you have made, in your opinion, what effect does the car over the cab have on the operating of a carrying vehicle?

A. Well it is a large body of considerable mass, suspended above the base or body of the vehicle, so that it is in the nature of an unbalanced body. The mass compared to its supports is very large, so that it has an unbalanced action on the rest of the moving vehicle in braking, steering, turning curves, making small turns to avoid collisions, and in fact on the whole maneuver of the moving body.

Q. Is it your opinion then that such a load is objectionable?

A. In many ways it is objectionable, yes.

THE COURT:

Q. Is it dangerous?

A. Yes, it is quite dangerous, due to a number of conflicting forces that are very hard to make work together.

BY MR. KEITEL:

Q. Professor Ulmann, I show you what purports to be a drawing, marked Defendant's Exhibit "II", did you prepare that drawing?

A. I did, yes.

Q. I show you a graph marked Defendant's Exhibit "JJ", did you prepare that graph?

A. I did.

Q. I show you Defendant's Exhibit "KK", consisting of three drawings labeled Figure "3", Figure "4" and Figure "5", respectively, did you prepare that drawing?

A. I did.

Q. I show you Defendant's Exhibit "LL", containing two drawings, one labeled Figure "6" and the other, Figure "7", did you prepare that drawing?

A. I did, yes.

Q. I show you Defendant's Exhibit "MM", containing computation, and ask you did you prepare that computation?

A. I did.

Q. Also I show you Defendant's Exhibit "NN", and ask you if you prepared that computation?

A. Yes.

Q. I show you Defendant's Exhibit "OO", which is a drawing, and ask you whether you prepared that drawing?

A. I did.

Q. I show you Defendant's Exhibit "PP", consisting of six pages of typewritten formulae, and ask you whether you prepared those?

A. I did, yes, sir.

Q. These are photostatic copies of the originals that you prepared, is that correct?

They are correct copies?

A. Yes, they apparently are correct copies.

Q. In your study did you make a study of the effect of the center of gravity of a load of a car on the cab on the stability of a moving vehicle?

A. I did, this study here.

Q. Marked "PP"?

A. "PP" is a study of the action of the various forces and their points of action on a vehicle of this type with a car over the cab as it passes around a curve, which is a most serious condition of operation.

Q. Will you state first for us your conclusion and then your reasoning whereby you arrived at it?

A. In motion a curve—I want to make it plain that I don't mean the formal curve in a road that is only a very little turn that a car may make in operation, because just as soon as it leaves the straight traction all these forces come into play, whether it is only a few feet diversion or quite a few feet. Now the calculations that I reached here, I have calculated a tractor with a car over the cab and the same tractor with the same car loaded in the normal manner and comparing the two the result is that the tractor with the car over the cab shows that it must be operated at least 27 per cent. less speed to be safe.

Q. Are your computations figured on the possibility of a car over the cab alone or with the rest of the load?

A. With the car over the cab alone.

MR. McNEES: If the Court please, we object to any testimony of that sort, there is nothing in the record anywhere that a car was ever carried that way.

MR. KEITEL: May we develop this matter further before any decision on that point is reached?

Q. Does the presence of the car over the cab affect the center of gravity of the carrying vehicle, as to the vertical center of gravity?

A. In combination, yes, most certainly.

Q. Does it affect the weight on the front axle?

A. It most certainly does.

Q. Irrespective of the balance of the load?

A. It does.

Q. Is the car over the cab a factor in addition to any other factor in the balancing of the load?

A. It is because it is farther forward than any load can be put on a normal truck.

MR. KEITEL: Your Honor, I believe that explains that that is a physical factor and exists with or without the balance of the load.

BY THE COURT:

Q. How is the pressure, vertical or at an angle?

A. The pressure is vertical, your Honor, always.

Q. Straight down?

A. A given factor is always independent of any other factor, it is always an addition, so that whether you carry the car over the cab or not the load on the rear has no effect on what would be the additional traction on that load over the cab, because it is in a normal position.

Q. Where is the danger?

A. The danger comes in that it increases the loads on the axles and moves the center of gravity so far forward that the combination is apt to become unmanageable.

Q. Have you any record that it has become unmanageable?

A. Not of my own observation but I think some of the testimony that has been given previously would show that.

BY MR. KEITEL:

Q. Professor Ulmann, I show you Plaintiff's Exhibit "H", which shows a carrier with a car over the cab and one in No. 2 position, which is not on a trailer; would the testimony that you are about to

give as to the center of gravity be applicable to a situation of that sort?

A. Yes, most certainly, because the center of gravity of this car is directly over the rear axle, and therefore the weight that overhangs there is in effect on a loading of the forward part of the vehicle.

Q. Meaning the second car?

A. Meaning the second car, it has no balancing effect whatsoever on the car over the cab. The center of gravity then of the car is just about under the driver's seat, and that of course is the center of action of all of its weight and that because it becomes directly over the rear axle, which is a neutral point and gives no stability to the forward load.

THE COURT:

Q. Here the forward load seems to be in front of the front axle?

A. That I think is simply the shortening of the picture due to its angle, your Honor, the angle of the picture makes that.

MR. McNEES: If the Court please, we want to press our objection, because not only our witnesses but the witnesses of the defendant have testified that in no event is the car carried over the cab without the rest of the load on. This witness describes a situation in which there is no other load on the car except the car over the cab, which never exists, and which we think is quite irrelevant in this case.

THE COURT: I understand he has testified as to the load on top of the cab regardless of whether there is any car behind.

A. That is the effect of that, particularly in addition to anything else.

MR. McNEES: The Court will remember

the testimony to the effect that the cars on the end of the trailer tend to balance them and press down the balance of the truck and that operation relieves the weight in the front. This witness has not taken that into account.

MR. KEITEL: Here is a case, Exhibit 1, where there is nothing on the trailer. This picture was taken along the road, here is a very good example. That is in evidence.

THE COURT:

Q. Professor, what is the effect in making a right angle turn, to the right or left, on the engine with load on top of the cabin?

A. It being in the nature of almost a detached mass superimposed, its momentum tends to carry it straight ahead and it follows later than the turn of the truck, so that there is a lurch of that nature and the sharper that turn the worse that condition becomes.

Q. Is there any record of a truck upsetting going around such a curve loaded in the way we have it indicated?

A. Not on a formal curve, but I think in cases where a sudden twist would have to be made to avoid a collision I think those have been shown in evidence.

THE COURT: I was thinking about making a right-angle turn. For instance, I saw one a couple weeks ago where such a loaded truck came down Front Street in front of my residence, then turned into Forster Street, it was a left angle turn.

A. Yes, they would have to make it at very slow speed as usually the driver has warning of such a turn as that and he drives accordingly, and it is the

little twists and turns on the main highway that are the ones that cause the trouble.

Q. Will you proceed with your description of the laws of motion?

A. The forces that come into play in a moving vehicle of this type, or of any type, is the momentum in the forward operation, while it is in motion. It is the nature of stored inertia which seems to be absorbed when you make a turn, or in braking, then if you make a turn beyond centrifugal action away from the center of the curvature, because in that connection that tends to tip the vehicle over or throw it off to the outside of the road, which force comes to the center of gravity of the vehicle and its load. If the center of gravity be high and the vehicle fairly light the centrifugal force will tip the vehicle over readily. If the vehicle be heavy above the center of gravity, up high, it will not tip it so easily, there is a point of equilibrium, the weight of the vehicle coming vertically through the surface of the road is the force which acts against centrifugal force, which tends to turn it over, or the momentum which tends to carry it in a forward direction, keeping it from following a curve. Now when the center of gravity becomes excessively high, or we put, as we have in this case, a large detached mass, or homogeneous mass which is detached entirely from the only anchor to it, by flimsy anchors of chain, those masses act separately and we have to consider their actions separately. It raises the center of gravity very high and therefore the thing tips over easily. Now I made a calculation here, assuming a weight, I took the tractor shown in one of the exhibits—

Q. This is Exhibit "J", is this the Exhibit?

A. That is the exhibit.

Q. That you used?

A. Yes, that I used, and I assumed mounted on that the heaviest car that is carried by this particular tractor, a Chrysler, weighing 3565 pounds, which of course is an extreme case, and then following through the method of calculation, calculating the center of gravity first, then the action of the centrifugal force on an assumed curve of 100 feet radius for various speeds of the car, I plotted a curve, Exhibit "JJ". The first curve shows, this curvex here shows the centrifugal forces plotted against speed, for this particular curve, and this other shows a normally loaded truck with the same load and same weight, centrifugal force is plotted against speed. This added line here is the weight of the truck and its load and where that line intersects these two curves shows the point at which equilibrium is reached on a part of the curve. Above there is unsafe, that means that the load on the tracfor will turn over at that point, below that it is safe. The normal load with a low center of gravity gives a speed of 36 miles an hour a safe speed on 100 foot radius curve. With a car over the cab it gives a speed of 25 and one half miles an hour only as a safe speed at the point where the thing will turn over. So that the safe operating speed under all perfect conditions is reduced 27 per cent. by this type of loading. Of course unfavorable conditions make this worse, crowned roads will decrease the margin of safety according to the amount of the crown, a crown of four per cent. decreases the stability by about 20 per cent., a bump will cause the upper load to lurch and strain before it adjusts itself to the movements of the lower load, and if this

occurs at the time of steering very serious—well, you may say a mixing of the forces takes place, they become very incompatible and the one overcomes the other and may result in very serious trouble.

Q. Defendant's Exhibit "PP" shows this calculation in detail?

A. It does, yes.

THE COURT: Are you speaking now of the highways which we have between Carlisle and Shippensburg?

A. I am not very familiar with those districts.

BY MR. KEITEL:

Q. Referring to the graph marked Exhibit "JJ", would the results of this graph be different with a load on the rear of the truck or trailer, and if so in what respects?

A. A load on the rear of the trailer might add some slight stability but it has to be borne in mind that the stability factor, the width that is at the base of the operation of the front of the truck is much narrower than the width at the back, because dual tires are used on the rear and single tires on the front, so that although we may put a stabilizing load on the rear it will not have much effect, because we have not increased the base of stability in the front, we still have our single tires on the narrow base of stability there. The dual tires add—over a foot to the width of stability.

Q. In an ordinary vehicle loaded in the ordinary way would stability be increased the same or less or more by bumps in the road at a curve?

A. It would have less effect on it because the center of gravity of a normal load, whether it be an increasing or decreasing load, is always farther

to the rear of the chassis, it is within the rear third of the chassis always.

Q. Would the load with a car over the cab place the center of gravity of the entire vehicle more to the front?

A. Yes, it puts it within the front third of the total load.

Q. Referring you again to Defendant's Exhibit "PP", page 4, I ask you to explain this table in which you summarize the findings at the foot of that page?

A. The first column is what we call the independent variable, that is the variable we fix in any calculation, and that is the speed in miles per hour, then next comes the velocity in feet per second, corresponding to the miles per hour, then the square of the velocity, which is necessary for the calculation of the centrifugal force, then a column which is the velocity squared over the radius of the curve in feet, then the fifth column is the mass or weight divided by the acceleration of gravity, 32.2 feet per second, then the column marked "C" is the actual centrifugal force in foot pounds, which is accelerated by your vehicle and load at the particular speed at which it is opposite. Then figures 4, the columns F, figure 4 and F figure 5 are the forces that are necessary to balance the action on the center of gravity as it acts, the centrifugal force, as it acts through the center of gravity. We have to add moments, it is solved by the theorem of moments, we have to add moments about any convenient point, and in this case I have selected the top point, that is the contact of the outside tire with the ground as the point of moment.

Q. Figure 4 and Figure 5 that you refer to, what speed are they on?

A. They are on this curve here, Figure 4 and Figure 5 are plotted against speed, are the forces shown there.

Q. On the graph marked "JJ"?

A. Yes.

Q. Are they also on any of these drawings?

A. No they are not shown on any of these.

Q. There is a calculation at the bottom of that table on Figure 4 and Figure 5, what does that refer to?

A. That is simply a statement of the formula, all gathered into one small expression.

Q. What is the "F", the center of gravity?

A. Well, "F", is equal to a certain factor times "C", that is, the balancing force is equal to a certain factor, it is the centrifugal force meeting "F", being the balancing force. If the center of gravity be high as in Figure 5 the ratio of 595 over 272 is large; if as in Figure 4 where the center of gravity is much lower, the ratio 393 over 347 is only about 1, for Figure 5 the ratio is nearly 2, and for Figure 4 or the normal load, it is just a little over 1. Those are dividing signs between the "C" part and forces are equal to a certain ratio. This is a dividing sign, this 595 over 272 times the centrifugal force. In an abnormal load that ratio you see is high and in this case we have 393 divided by 347, which is much lower than this ratio, therefore it shows that a much smaller force will balance in this case than in this case (indicating). It boils down to a very simple calculation which is easily understood.

Q. Does this table and calculation on Exhibit "PP", page 4, support the graph on Exhibit "JJ"?

A. Exactly, one is a reproduction of the other.

Q. What does your calculation show as to height of the center of gravity on the Figure 5, the car loaded over the cab?

A. It is too high for safety—well, I will qualify that: if you want to operate your car safely you will have to operate at lower speed, with a lower center of gravity in a normal load.

Q. Do you have any figures in feet computed?

A. Yes, right there on page 4 for Figure 5 the height of the center of gravity of the combined load is 5.95 feet, practically six feet. For Figure 4, where the car is loaded normally back of the cab, the height of the center of gravity is 3.93 feet, or about two feet less, just about two feet less in height.

Q. Let me show you drawing marked Exhibit "KK" and ask you whether Figure 4 or Figure 5 in this computation are the same as the drawing on that chart?

A. Yes they are, those are the figures I referred to.

Q. Do you know the height of center of gravity of the ordinary vehicle, whether it is higher or lower than those figures you gave?

A. Very much lower. You can get those centers of gravity from the manufacturer at any time, but a good rule, that is for anybody to judge it by, is that on a passenger car it is just a little bit below the top of the tires. In a Ford V-8 it is 26 inches above the ground and in these Chryslers it is 28, something like that. The tire height varies it more than the actual movement of the vehicle.

THE COURT: In a LaSalle?

A. Just about the same, whatever the tire size is, if you calculate that height two inches below the

top of the tire would be the center of gravity.

Q. Is the same rule true generally for the trucks?

A. For the chassis, yes.

Q. How about when they are loaded?

A. That depends on the load and the body and everything that is put in addition, that has to be calculated separately. The manufacturer also gives the fore and aft center of gravity of the chassis, the salesmen have that. A truck isn't so given, but it can be gotten readily.

Q. Before we leave the question of the center of gravity, I show you Plaintiff's Exhibits in several books, marked from 22-A to 27-D, and ask you your opinion as to whether the load as shown there would raise or lower or have any effect on the center of gravity?

A. If this first one here is a truck—

Q. 27-D, it is on the back.

A. 27-D is a truck loaded with chicken crates, the mass of that load and structure is so small that the center of gravity will be raised very slightly, the weight is almost—well, in comparison with the weight of the chassis it is very small.

Q. Look at some of the others.

A. 27-C is the same one. No. 26 is a Packard truck and there again the load is a very small mass and the center of gravity would not be raised very greatly from the normal center of gravity in the chassis.

Q. If that is loaded solid with bread would it raise the center of gravity to any appreciable extent?

A. Oh, yes, it may be a foot. That is just a rough guess, it is a foot or some 14 inches, some

such figure as that, but the body will weigh more than the bread I think.

Q. 25-D doesn't show anything. 25-C is a cattle truck.

A. Well, that is what we call an ununiform lead, it would have to be calculated out separately, but the center of gravity would not raise appreciably.

Q. 24-C?

A. 24-C is miscellaneous loading, apparently, a transfer company. There of course the center of gravity is more variable, depending upon what it is loaded with. If loaded with a lot of furniture it would be somewhat higher but not greatly so, because the mass of such a load is small.

Q. That is the same one I think.

A. Motor Express, that is the same condition, variable. 23-B, variable loadings, increasing and decreasing all the time, the center of gravity high only when you happen to have a full load, which is only a small portion of the time.

MR. McNEES: We will have to object, there is too much of this. I doubt if this witness has any idea of what period of time loads are carried over the cab. We have not objected so far.

THE COURT: You have a right to cross-examine him.

Q. I guess this covers all of them.

A. Yes, that covers it.

Q. I believe that you testified the center of gravity of Figure 5, that is a vehicle with the car over the cab, was 5.95 feet?

A. Yes, sir.

Q. Do you know of any type of vehicle which has a higher center of gravity than that?

A. No, I don't.

Q. Any type of automobile on the highway?

A. No I wouldn't know.

Q. I also show you Plaintiff's Exhibit No. 10, blueprint purporting to show the center of gravity of a vehicle with a car over the cab; in your opinion is that a correct description of the center of gravity of such a vehicle?

A. This drawing shows the center of gravity as just about at the top of the radiator and very very light or the chassis a very heavy one, such as something in the neighborhood of a five-ton truck. It seems to be too light, I would say offhand, in glancing at it.

MR. McNEES: If the Court please, I think we ought to have a direct answer to that. It is either too high or too low and this witness is qualified to say.

THE COURT: Up to this moment I think he is in doubt about it.

MR. McNEES: I don't think the answer ought to go into the record.

THE COURT: No, unless he can express an opinion positively it will not be of any assistance to the court.

A. Well, I think it is too low.

Q. Can you tell from that drawing how the center of gravity was computed for the purpose of that drawing?

A. No.

Q. Did you ever see a carrier, or any kind of a truck, with double wheels on the front?

A. Only in very slow moving vehicles of very large capacity.

Q. Would that change or lower the center of gravity to any extent?

A. It would have no effect on the center of gravity but it would add stability to the forward part of the truck by making the width of the tire tread much wider.

Q. Would it help the steering to any extent?

A. That has never been successfully applied for high speed work, or even fairly high speed, that I know of.

Q. And why not?

A. When you try to steer a dual tire like that one tire drags while the other moves, because it is working on a different radius and they wear gradually and up to now within my experience it has not been successfully applied where the speeds are high or reasonably high.

Q. I show you Plaintiff's Exhibit No. 9 and ask you whether you believe the center of gravity is correctly computed on that one?

A. These cars appear to be of equal weight and if that is true the center of gravity is not correctly computed, it would be midway between the center of the hood and center of gravity on the top car and the bottom of the—

Q. Midway between would be somewhere in there (indicating), somewhere in the windshield area of the bottom car being hauled?

A. Yes, somewhere near the top of the windshield would be the point.

Q. What is the tipping angle shown on that drawing?

A. 38.5 degrees, 38 degrees five minutes.

Q. I refer you again to Plaintiff's Exhibit 10, what is the tipping angle shown on that drawing?

A. The complement of 54.18, that is 36 degrees is the angle that corresponds to this one here.

Q. Is there anything shown on this drawing which would make the tipping angle different between the one and the other?

A. Yes, the dual tires here should make it less in this case than in this case—excuse me, no greater because it would tip over before it would turn over.

Q. In other words, the dual tires shown on Exhibit 10 should make the tipping angle greater than that shown on there (indicating)?

A. Yes, because it could tip over before it would turn over.

Q. As a matter of fact, the tipping angle shown on No. 10 is less, is it not?

A. Yes, but the center of gravity is just about the same. It is less.

Q. Professor Ulmann, have you made any study of the effect of the hauling of a car on an axle or tire?

A. Yes, I made some calculations as to what the probable weights on the front axle would be.

Q. What calculations did you arrive at as to those?

A. The calculation for Figure 5, the case where the car is over the cab—

Q. That is Exhibit "MM"?

A. Exhibit "MM", yes. For Figure 5 with the car over the cab we have 5800 pounds on the front axle and that is an MF 37 truck, and the manufacturer gives for the allowable load on that 3,000 pounds on that front axle.

Q. The figures referred to on Exhibit "MM", are they contained on any of the drawings?

A. No, that is just a statement.

Q. I mean in any of these figures?

A. Oh, yes, they refer to those figures, that is for the arrangement of the loading.

Q. They refer to Exhibits "KK" and "LL", is that correct?

A. Yes.

Q. How do the manufacturers design axles with weight in mind?

A. The design of an axle is naturally made as light as possible and still with the necessary strength, because they have to save as much money as possible in the manufacture and not put anything in that is not necessary and for the conventional truck they usually figure from the possibility of loading, that is with the cab back of the engine. It isn't usually possible to load any more than 25 per cent. on the front tires and 75 per cent. on the rear tires, it throws a little bit more load to the rear than is really desirable but the top of the chassis is the limitation. In the cab over the engine top it is possible to move the load up farther to the front and there they get nearly an ideal condition, that is 33 1-3 per cent. on the front axle and 66 2-3 on the rear axle, which makes a fine distribution of load over the six tires, four duals on the rear and two on the front. So that the axles are designed according to the type of truck upon which they are placed and they are designed for the maximum expected load and if that is exceeded why trouble is very liable to ensue.

Q. Would you say that according to that computation that a car over the cab would result in the overloading of the front axle?

A. In many cases yes.

Q. What effect would the car over the cab have on steering?

A. Well if it is a case of overloading the front axle the steering gear is also overloaded, the tires may be overloaded and that means excessive force must be applied on the steering wheel, the steering knuckles, worms, the ball, the ball gearings, and all those things designed for smaller loads are strained more than they were meant to be strained.

Q. State whether or not such a cargo affects the braking?

A. It does in two ways, one is that under normal conditions they always have a tendency of the load to transfer on to the front axle. Everyone is familiar with the fact that when they see a passenger car braked that it always comes down on the springs, on the front axle, now the higher the load is above the level of the axle the greater that force has in braking, so that a very considerable impact comes on the front axle when the car is braked and the higher that load is the higher the center of gravity of the load and the nearer forward it is the greater that impact is on the axle.

Q. Would the center of gravity have any effect on braking in turns?

A. Yes, it complicates the situation very much, the high center of gravity does in that case. because the braking acts in a straight line and the car is moving in a curve and we have considerable—well, disequilibrium in the forces that are to be overcome.

Q. Should the cargo over the cab, with the car over the cab make the steering any more difficult?

A. Well, yes, in that it imposes greater necessity of care on the driver and therefore increases the

driver's fatigue. If the car over the cab constitutes an overload his physical fatigue is greater because it requires more force for the same amount of steering than with a normal load, then the sway of the load and its abnormal action will impose on him a mental strain which combined with the other, increases the driver's fatigue.

Q. Now, I believe that there has been testimony about the fifth wheel of the trailer being to the rear of the rear axle on the tractor in much of this equipment, do you see any objection to that?

A. Yes, I do.

Q. What is the objection?

A. The impact of the trailer load on that junction pin, the pintle pins are multiplied in the chassis of the truck by the lever arm, or the distance between the pintle pin and the rear axle, so that while the truck is in motion and receiving road shocks the deflections of the chassis are greatly increased, due to the fact that you have those shocks at the end of the lever arm of the junction back of the rear axle.

Q. Does the fact that the fifth wheel is back of the rear axle exert an upward pressure on the front wheel?

A. Yes, it does.

Q. Is it any different whether it is standing or moving?

A. Yes it is, in standing it is static and that force is constant, but moving that force is very variable, it may constitute a downward force as well as upward force, depending as to whether the load on the trailer is rising or falling due to the bumps in the road.

Q. Does that variable force in motion have any effect on the angle of the headlights?

A. Yes, it would keep them rocking up and down or if the truck were loaded by the rear without any car over the cab it would make them shine upward. If loaded in the front and lights set for that they would be normal and then in operation they would bob up and down due to the fact of that action on the pintle pin.

Q. Have you made any study of the physical difficulty besetting the anchoring of that car over the cab?

A. Yes I did make it. The usual practice is to use small chains. Of course where you are dealing with impacts, as you would be in the case of collision, it is difficult to make any very definite statement. Take that 3500 pound car on the top of a tractor, as we have been using in previous calculations, at 25 miles per hour it has 75,200 foot pounds of energy stored in it while it is in motion. If we stop that in ten feet that means that we have to overcome a force of 7520 pounds. If we stop it by collision in one foot we have to overcome a momentum force of 75,200 pounds, and if it were possible to stop it dead the force is infinite, the impact force in infinite. So that our chains that hold it must be calculated for anything between reasonable braking and the most severe collision. Probably the most severe collision would be stopping a vehicle in ten feet. That would mean that we would have absorbed a force of 7520 pounds in those chains. A chain of 1-3/8 inch links made of 3/8 inch material is sufficient —four of those—to overcome such a shock, provided that all have equal tension.

Q. Is this a chain such as you have in mind? I show you Plaintiff's Exhibit 4.

A. Almost identical. That is about 3/8 by an inch and a half, I should say almost identical.

Q. Now I understand that if there were four of those holding a car over the cab of this weight that you have mentioned, and that all have equal tension, that that will hold it on if stopped within ten feet?

A. Yes.

Q. Would two chains such as that hold it on?

A. No.

Q. Would four chains such as that hold it on if the tension were not equal?

A. No.

BY THE COURT:

Q. Why not?

A. Because the chain with that gross tension would take all the load first and it would snap and other chains would follow in succession in braking.

BY MR. KEITEL:

Q. Where is this force located that you are speaking of that would have to be overcome?

A. It is the force, sir, in the mass of the vehicle acting through its center of gravity in the direction of the motion of the car.

Q. Which vehicle?

A. The loaded vehicle.

Q. The one over the cab?

A. Yes.

Court Adjourned Until 10 o'clock, A. M., December 31, 1937.

Harrisburg, Pa., December 31, 1937, 10 A. M.

AUGUST ULMANN, JR., Recalled.

Direct Examination

BY MR. KEITEL:

Q. I believe that yesterday when we adjourned

you were discussing the force that would be applied to the car over the cab in a carrier that had met with an accident, or was stopped; now at what speed was the figure that you gave for the force calculated?

A. I assumed a speed of 25 miles per hour and a car weighing 3500 odd pounds carried over the cab. Now this force goes up as the speed increases it rises very rapidly. At 25 miles per hour there was 75,200 foot pounds stored in the moving load and at 35 miles per hour this would shift to 143,000, 40 miles per hour 193,000 pounds.

Q. If stopped?

A. That is store, that is in the vehicle if the vehicle say is stopped in ten feet, which it is hard to say, but that would be about what the severity of what a very severe collision would be, then it would be one-tenth of that force, 193,000 would become 19,300 pounds.

Q. Would chains like Plaintiff's Exhibit 4 be sufficient to hold the car over the cab if the hauling vehicle was stopped within ten feet at 40 miles per hour?

A. No they would not, they are not strong enough for that.

Q. If the chains do hold when there is a collision what happens to this force that is in the upper car?

A. It is transmitted to the structure of the car-carrying vehicle.

Q. How would that manifest itself?

A. In powerful distortions, breakage, destruction would be the result.

Q. Now I believe certain of the other witnesses testified that steel of 100,000 pounds per square inch tensile strength in the body of the haulaway, 60,000 pounds per square inch in the superstructure and

runway was used in the manufacture of certain of this equipment, would that be sufficient to withstand this force at 40 miles per hour, would you say?

A. The actual tensile strength of material is no gauge of what the structure would stand and since sections of the structure were designed accordingly that is, the angle irons have equal strength of 100,000 pounds, would be smaller than angle irons at 60,000 pounds tensile strength.

Q. Would there be a similar force involved in a cargo of chickencoops or furniture or barrels or other cargo that might be hauled in the vehicles?

MR. McNEES: We object to the question in the form unless the weights are to be definitely set forth.

THE COURT: I think that objection is sound.

Q. Let me ask you this: could you get 3500 pounds of chicken coop, furniture, barrels, kegs or other cargo in any of these vehicles shown to you just where they have a compartment over the cab?

A. I don't think you could get that weight in chickencoops, you could in barrels if they were heavy barrels of the type of beer kegs, furniture very likely you could get such a load.

Q. Could you get enough of such a cargo in any of those compartments to make that much load?

MR. McNEES: We think this is purely conjecture. You could load gold in there in a two foot space and get your weight probably. I think we ought to have an actual situation.

MR. KEITEL: The plaintiffs have introduced these automobiles to show that there are other cars that carry things over the cab, with the inference, as I take it, to show that there is not sufficient difference between those and the

cars here. We are attempting to show that there is some difference and I believe that is relevant.

MR. McNEES: If the Court please, it must be shown by facts.

We are entirely satisfied with the testimony that if the same weight was put there it will have the same result.

THE COURT: I think your objection is sound, Mr. McNees.

MR. KEITEL: May it please the Court, we would like to present these pictures again and have this point brought out, this is our only opportunity to present evidence for that purpose and if the pictures of the plaintiffs are material at all, it seems to me, that we have a right to ask this witness whether the same conditions would exist as to that equipment.

THE COURT: With the same load?

MR. KEITEL: Yes; you can't get a car into those moving vans and chickencoop haulers.

THE COURT: You cannot, you couldn't get them on top of a cabin.

MR. KEITEL: No, the amount of space up there is limited. The Court could almost take judicial notice of how much stuff you could get into one of those things.

THE COURT: It would depend on the bulk, it would depend, to some extent, on the weight, because we are now dealing with a 3500 pound automobile on top of the cabin.

MR. KEITEL: That is correct.

THE COURT: You could put 3500 pounds of gold nuggets on there that would not occupy very much space.

MR. KEITEL: I don't believe these trucks

ever had gold nuggets or anything of that specific gravity.

THE COURT: I think we had better confine ourselves to what we have before us, the loading of another automobile on top of the cabin, that is the only issue we are trying.

MR. KEITEL: We are willing to confine it to that. Then these pictures of the plaintiffs are not material either on that point?

THE COURT: I have not seen them, I do not know. Are you offering them in evidence, Mr. Keitel?

A. No, the plaintiff has offered these in evidence, they are already in.

MR. McNEES: If the Court please, I think probably the purpose of introducing those exhibits is this: the law not only prohibits the putting of a car over the cab but any part of it; if there is ten pounds of weight over the cab it is prohibited by law, and these were introduced to show that some weight was over the cab, in one of these cases weight equal to the heaviest car that could be carried.

MR. KEITEL: We don't say that it is equal to the heaviest car, we are not contending that, but we do say it is an entirely different problem from weight standpoint in a cargo of this type as against cargo of automobiles.

THE COURT: They are in evidence now for what they show, that is all.

MR. KEITEL: Then we are willing to abandon this line of questioning, if we understand that the weight of the cargo over the cab in these things is not in issue in this case.

THE COURT: I do not think it is. What

does the Act say, does it say other automobiles or any loading over the cab?

MR. KEITEL: It just says automobiles, the Act does not apply to these things.

MR. McNEES: The Act says: "Any part", if the bumper hangs over.

THE COURT: It does not say chicken coops?

MR. McNEES: No. These things are introduced to show that there was discrimination by picking out a car or part of a car and letting all other weights to be carried over the cab.

MR. KEITEL: I may say in that connection that when these were offered we consented that they were admitted subject to our objection as to their relevancy. I don't believe it is averred in the pleadings, so I believe your Honor is entirely right in disregarding them altogether.

Q. I show you Defendant's Exhibit "O", and ask you whether, in your opinion, that type of construction is sound?

MR. McNEES: We will have to object to that question.

THE COURT: We will receive it subject to your objection. Proceed.

MR. McNEES: May we note our objection, the reason for it? It is that this witness has not shown any experience in the construction of any car of this sort at all.

THE COURT: If he does not know he will say so, I assume.

MR. KEITEL: The witness has demonstrated his knowledge of types of construction

and tensile strength, which has been testified to here previously.

THE COURT: It seems to me that the important thing here is for you to show, if you have not shown it, that accidents have happened because of this method of transportation.

MR. KEITEL: We have already shown that, your Honor.

THE COURT: Yes I think that was quite a while ago.

MR. KEITEL: Yes, I think it was.

A. The question here is whether this is strong enough to carry the vehicle?

Q. Yes, that is correct.

A. It is strong enough to carry the vehicle but its behavior under conditions of collision is very problematical, because one can never tell where the force is going to be applied. In a collision even the strongest and most homogeneous structures are subject to damage and destruction if the force is applied advantageously, particularly in the condition of impact force such as we have in the case of collision.

THE COURT: Just asking for information, because Judge Hargest raised this this morning; as I recall, when a vehicle approached and got behind one of these, whether there was danger in trying to get around it? It seems to me there is some evidence of that.

MR. KEITEL: I don't recall that, your Honor, but I suppose that would be true.

THE COURT: I think that is an element that you might think about.

MR. McNEES: If the Court please, we don't think that it would have anything to do

with carrying a car over the cab, to put them below would make it longer. The only issue is over the cab, it is not length nor width nor height.

THE COURT: Proceed.

Q. I show you Defendant's Exhibit "T," and ask you whether you believe that that construction is safe to support the car in the event of a collision?

A. I believe not, because these struts are so continuous that the impact with the collision striking here would buckle those and the whole structure would tend to dive over the front of the car.

Q. Generally speaking, is the securing of the force or of the weight by chains sound from an engineering standpoint where an impact is probable?

A. It is not, because chains are very treacherous, they must be in tension, if there is a little lack of tension impacts are formed and they break readily. Everyone is familiar with the fact that a strong pull on a string will not break it but a sudden pull will break the same string with much greater ease, and the same thing applies to a chain.

Q. What sort of rigging is advisable where tension is to be expected?

A. When they use chains they tension them, put a separate jack under the point where the chain is attached to the load, to bring all the chains at equal tension and those jacks are very carefully inspected during transit at all times.

THE COURT: What do you mean by a jack?

A. A screw jack. Here the chain is attached to the floor and beneath the corner of the top they

put a screw jack so as to pull all the chains at equal tension, then they act properly.

THE COURT: Has such provision been made?

A. I have never seen such provision. In some cases there is a cross bar in the nature of a windlass that draws the chains down, but there is no provision for individual action so that the tensions will be equal.

BY MR. KEITEL:

Q. Professor Ulmann, have you made any study of the degree to which the driver's vision is obscured by having the car over the cab?

THE COURT: We had that yesterday.

MR. KEITEL: Not from Professor Ulmann.

THE COURT: No.

Q. I show you Defendant's Exhibits "NN" and "OO", which I believe you stated yesterday you prepared, is that correct?

A. That is correct, yes.

Q. What do those exhibits show with reference to the—let me first ask where you got the dimensions used in Exhibit "OO"?

A. The dimensions used were furnished me by the—is it the Department of Revenue?

Q. Yes.

A. The Department of Revenue, and were made, I believe, by one of their inspectors or patrolmen on the road of a tractor on which the vehicle carried over the cab was entirely horizontal. That is, the two were horizontal and the rear was over the front of the tractor and extended quite a distance beyond the bumper of the tractor, of the carrying tractor.

Q. Do you recall hearing those dimensions given in court at the trial of this case?

A. Yes, they were given at one of the previous hearings, I believe, and I checked them as they were given.

Q. Will you explain to the Court what those two exhibits show with reference to obscuring the vision by the presence of a car over the cab?

A. Well, it is a calculation and a sketch showing the visibility, the result of a calculation which gives, first, the minimum distance at which the traffic light is completely visible and the distance at which it entirely disappears from the driver's vision. The calculation is made by knowing the height of the driver's eye and the height of an obstruction from the ground, taking the slope of his vision and carrying that out to the point where the traffic light would be, using the height of the traffic light as 15 feet, which I believe is the clearance specified by the Traffic Code.

Q. Is that drawing in scale?

A. That drawing is not in scale, because it would be too long to put on 8½ by 11 paper.

Q. How would it look if it were in scale?

A. This distance of 103 feet there would probably be about two and one-half times as shown.

Q. In other words, the entire sheet would be longer approximately two and one-half times?

A. Yes, two and one-half times, approximately. Of course the traffic light is more than 100 feet distant, he sees it readily, and when it comes to 103 feet the traffic light begins to be obscured and at 81 feet odd the traffic light is completely obscured.

THE COURT: Driving in an ordinary auto-

mobile, a closed car, would not the same rule apply?

A. No, because you can see well.

THE COURT: A closed car I mean?

A. Yes, a closed car, with a very small movement of the head you can see up at an angle of much more than 45 degrees to the horizontal, much more.

BY MR. KEITEL:

Q. Professor Ulmann, I show you Plaintiff's Exhibits "O" and "P" and ask you whether, in your opinion, the side supports for the runway on top interfere with the driver's vision in any manner?

A. Yes, there is considerable interference there, in the case of Exhibit "P". In the case of Exhibit "P" the corner frame of the cab is augmented double the size by this additional strut passing up the outside.

THE COURT: Is that the strut (indicating)?

A. This one here, the additional. You see it lies along side the corner of the cab and that increases the width here nearly doubled it. It is true of both sides. The corners of the cabs are known to be considerable cause of accidents.

MR. McNEES: If the Court please, we just want to enter another objection to this. There is no evidence at all in this proceeding that he is an expert on accidents. There has been so much of that that I don't see how you are ever going to separate it in order to consider that objection. There is no evidence that he knows the size of those struts, he does not know, and the picture they use is just as intelligent to the Court as to us.

MR. KEITEL: We have not asked him how much of an obstruction, we just asked him whether there is an obstruction.

A. It shows additional obstructions, there is no question.

MR. McNEES: That is in the picture, we will not object to that.

A. This also shows additional obstruction, Exhibit "O".

THE COURT: In a passenger car, such as I use, the frame of the window at each corner also is an obstruction to complete vision?

A. It is a well-known cause of accident too.

BY MR. KEITEL:

Q. Professor Ulmann, I believe you have heard the testimony to the effect that many of these haulers the fifth wheel of the trailer is behind the rear axle of the tractor; now assuming, for the purpose of this question, that the plaintiffs' contention is correct, that in some of those the car over the cab is necessary to maintain balance, would the balance in such a vehicle be destroyed, such balance as there might be, if the vehicle over the cab were removed providing that the fifth wheel has been placed over the axle of the tractor, the rear axle?

A. No, if the point of support of the tractor is changed to be over the rear axle, the car over the cab may be removed with safety, perfect safety.

Q. Is it or is it not true that trailers generally have the fifth wheel there, over the rear axle of the tractor?

A. That is pretty generally true.

THE COURT: What do you mean by fifth wheel?

MR. KEITEL: The point where the tractor

tows the trailer, the point where the trailer is connected to the tractor.

Now there are two axles of course on what we call the tractor, the drawing vehicle, and the point of contact of the trailer is either in front of that rear axle of the drawing vehicle, or right over the top of it, or to the rear of it; now the plaintiffs have had witnesses to testify that where the fifth wheel is back of the rear axle they need the car over the cab to maintain this balance, and we propose to show here that it is not necessary to have the car over the cab to maintain such balance.

BY MR. KEITEL:

Q. Mr. Ulmann, why is the fifth wheel placed over the axle generally, what law of physics suggests that?

A. So that the impacts of the towing load will be received directly by the springs over the axle, for one reason. Another reason is because if it is attached to the rear of the axle it tends to raise the front of the tractor by—well, a see-saw effect that works through the lever arm, or the distance between the location and the rear axle and tends to tip the far end of the truck up on the tractor.

Q. Yesterday you testified, I believe, about the superfluous or extra weight on the front axle by the car over the cab; to what extent would your testimony be qualified by the type of equipment where the fifth wheel is behind the rear axle of the tractor?

A. In a static condition it would be qualified, the weight of the trailer acting on the lever arm, the distance between the fifth wheel and the axle would tend to balance a part of the load on the front axle

but in a dynamic condition, that is, running, it causes a see-saw action there, and heavy increased deflections are caused in the chassis of the tractor.

Q. Before introducing these exhibits into evidence I want you to tell us about the drawings that I do not believe have been mentioned, Exhibit "II", what was that drawn to illustrate?

A. That is the front wheel of a tractor with a car over the cab, showing the position of the center of gravity of the two cars and the force acting on the cars through the centers of gravity, as shown. The letters on that diagram correspond to the letters in the formula used in the succeeding calculation.

Q. That is contained, I believe, in Exhibit "PP"?

A. Yes.

Q. I show you Exhibit "KK" and ask you what those drawings were to represent?

A. They represent different systems of loading, Figure 3 tractor strap, Figure 4 a tractor with a load in the normal position, Figure 5 with a car loaded over the cab.

Q. Exhibit "LL", what do those drawings represent?

A. That represents Figure 6, the top illustration represents a tractor carrying a car over the cab and the car on the rear, and Figure 7 is a normally loaded truck.

Q. I notice that you have mentioned there on Figure 6, "KK" Exhibit, I show you Defendant's Exhibit "E" and ask you if that was the basis?

A. That is the basis for that sketch, Figure 6.

MR. KEITEL: May it please the Court, we offer into evidence Defendant's Exhibits "II",

"JJ", "KK", "LL", "MM", "NN", "OO", "PP", and we are finished with the testimony.

MR. McNEES: Our objection to those exhibits is a general one, incompetent, irrelevant and immaterial, because they do not show any actual state of facts.

THE COURT: Received, subject to your objection.

Cross Examination

BY MR. McNEES:

Q. Doctor Ulmann, I think you have just said that the basis of that calculation in the exhibit introduced was the Exhibit "E", showing the car over the cab?

A. No, that only applies to one calculation of the load.

Q. Which one was that?

A. It was the Paul Snyder. This is Figure 6.

MR. KEITEL: On Exhibit "LL".

Q. This was the basis of your figuring, set up under Figure 6; could you tell from Exhibit "E" whether there was a trailer attached?

A. I could not.

Q. Did you take into account a trailer that might have two cars on in doing your figuring?

A. No.

Q. Wouldn't that make a substantial difference?

A. Only statically, in static conditions, not running conditions.

Q. You mean that trailer would have no tendency by loading with two cars to keep the whole convoy from tipping?

A. The influence of that would only be on the

rear axle and the center of gravity of that combined load is so far forward it would have very little effect.

Q. Would the center of gravity be forward if there were four cars on this equipment on Exhibit "E"?

A. The center of gravity of this is so near the rear axle that it has very little effect on the combined centers of gravity of the chassis and the load above. Now, there are also rear cars and a trailer, the center of gravity of those have no effect on the forward load, because it is a coupled load.

Q. We understand you to say then that a truck with a car directly over the cab and nothing else on it will not tip any more easily than one with a car on the back of it and with a trailer fastened to it and two more cars on the trailer, is that correct?

A. You say it will not tip any more easily?

Q. Yes.

A. Well there would be some added stability but, not a great amount, because you see unit loads you have to consider separately, that is particular when they have large mass where they are near the exact base, such as the forward load there is over the front axle, it has to be considered separately. There is some connection between the two, that is true.

Q. You understand on this Exhibit "E" the tractor is a unit, that the weight of at least two cars would be on the tractor; disregarding now the trailer, do you feel that with the rear axle wider than the front axle that a 3,000 pound car setting over that would not tend to keep that tractor from tilting, no matter what was over the cab?

A. Yes it would.

Q. In other words, it would have to tilt the frame?

A. It would make very serious contortions.

Q. What do you say about the center of gravity in the tipping angle of a car over the cab construction would be through if the frame were cut in two directly back of the cab, wouldn't it?

A. Hardly, because then there would be no means of supporting the rear and that calculation would not apply if there is any means of supporting the rear.

Q. In other words, wouldn't it be easy to make the frame so heavy that you could not tilt that car if no other weight were there?

A. Yes, if you made it wide enough.

Q. So that it is a matter of degree of strength in the frame from the front wheels to the back wheels that affects the tipping?

A. To some extent, yes.

Q. Isn't that a very material extent, aren't the trucks designed for that very purpose?

A. No, because they are designed with the idea of the stability toward the rear, practically all trucks are designed with the center of gravity to the rear of the midline.

Q. If one wheel goes down instead of two you have a peculiar tipping condition?

A. Yes.

Q. And there might easily be a tipping angle, say the front wheel was, and if is restrained by the strength of the frame because the back wheels are level?

A. If the load is high.

Q. No matter how high it is, it would be infinite.

ly the strength of the frame, it is just a matter of degree?

A. Yes.

Q. I understand you have never designed one of those trailers?

A. No.

Q. Never had any experience with one?

A. Only personal observation.

Q. You never drove them. You never saw an accident caused by any car over the cab?

A. I saw one accident but it evidently was caused by faulty judgment of distance.

Q. You would not be able to say it was caused by a car being over the cab?

A. No, I couldn't go to that extent.

Q. Have you seen much of this equipment on the highway operating?

A. Yes, considerable of it.

Q. Did you ever see any operated in the manner in which you have adopted as the basis for your Exhibit "PP" and other exhibits?

A. Why yes, I have seen them with a car over the cab alone and also many of them are designed so that the tractor only has the one car over the cab.

Q. Did you ever see a convoy in motion with only the car over the cab and no other car on it?

A. I believe I have.

Q. Could you tell us where and what equipment?

A. Along Chester Pike. I don't remember the name, that is the maker of the tractor, nor the type of car carried, because at the time—

Q. Was the trailer attached, do you remember?

A. Yes, it was attached.

Q. So the way you remember it, there was a

trailer probably to carry two cars and the truck to carry one over the cab?

A. One car over the cab.

Q. That of course is unsafe operation?

A. Yes.

Q. Of course we agree with you on that, we have no fight about that. You spoke of structure shown in Exhibit "O" as interfering with vision, we also admit that, but will you tell us whether you know the size or strength of those posts?

A. This appears to be five by three angle iron with gusset plate welded at this point (indicating on Exhibit). It is more than four inches and it is something like that five by three but I know from my familiarity with structural types what was five by three.

Q. Will you tell us as near as you can what the plate is on which the car rests how heavy that would be?

A. This is about eight inches on that operation and from the sketch I can't tell whether it is two angle irons together or channel iron with reinforcement on the side or not.

Q. If it were even it would be amply strong to hold the load we are talking about?

A. Yes with static condition.

Q. You already referred to Exhibit "G", I think, in connection with your testimony about the chains; will you tell us whether you have figured your strength of the chain in connection with a directly forward movement for the truck to stop suddenly?

A. Yes, it was a directly forward movement.

Q. Have you seen the construction of any of these carriers, whether that is the correct move-

ment from which to figure? I show you exhibit, you have in your hand Exhibit "T", doesn't that show more about the strength and the strength of the chain if you were arresting a forward movement?

A. Yes—you mean the travels for the wheels?

Q. Yes, on which the wheels slip.

A. In the case of an impact of sudden force that would present very little resistance, because there are no gussets here on this particular design and this strut forward is so weak that the whole thing would buckle.

Q. What you mean is that the superstructure would break down, not that the car would go off?

A. The struts would break down and the car would tip.

Q. On Exhibit "O" that we just talked about the superstructure would not break down?

A. That is a good deal stronger than this one.

Q. If there were a plate or weld in front of that, as it is on Exhibit "O", you would have to have a great deal stronger force than would break a chain to throw that car off, wouldn't it?

A. Well when you are speaking of impacts, it is almost impossible to say how much severity of that kind would be applicable because we have so many bendings.

Q. It is safe to say this, that the stirrup or saddle would have to break before the car could go off in the line that it was proceeding?

A. No it could easily mount the saddle and break the chain.

Q. The breaking of the chain would be upward if the saddle didn't break, and not forward?

A. No, the chain would come in tension, it

doesn't make any difference whether it is upward or forward, the chain comes in tension before it would break.

Q. What I mean is this, suppose the saddle doesn't break?

A. You mean the component forces of the chain would be somewhat less?

Q. Yes.

A. Not very much less but somewhat less.

Q. Let us look at Exhibit "P", you notice there was an obstruction there right in the front?

A. Yes.

Q. Let us suppose that that would hold and would not break, wouldn't the entire forward forces be on that and not on the chain?

A. Yes it would.

Q. Then isn't it true that both the chain and that obstruction bear the impact of a sudden stop?

A. Why yes, sir, certainly, both share.

Q. And if the obstruction didn't break, then if the car got off the chain would have to break from almost upward tension, not a forward tension, is that correct?

A. Yes, that would be a logical conclusion, certainly.

Q. We want to pass on as rapidly as we can. I want to show you another exhibit marked 26-B, you notice there is some part of the truck over the cab there?

A. Yes there is.

Q. Now you spoke in reference to Exhibit "T", of the fact that there would be a tendency to buckle, even though there are three supports under the load?

A. Yes.

Q. As to Exhibit 26-B you see no support, do you, under the carrying load?

A. Of course this is an entirely different construction, the side of this acts as a cantilever beam, from here out, and therefore it needs no support below, particularly as it is not very long. In that case it extends clean out to here and in this case it extends less than half the distance, so that the two are not comparative.

Q. Isn't it correct to say that the safety of a load carried on the truck shown on Exhibit 26-B over the cab depends almost entirely upon the weight and you could put in there metals or something heavy enough to make it less dangerous?

A. Oh, yes.

MR. KEITEL: I believe we decided not to talk about weights.

Q. I want to show you Exhibit 25-D, does that indicate a truck with any struts in support of the load?

A. In this case the load deck is very high and it has a moderate support here (indicating on exhibit). Can you inform me as to what the load carried here is?

Q. No, I have no idea. The question I want to ask you is whether or not that brace, in your judgment, is necessary?

A. Oh, yes, that brace is necessary perhaps because the side of the section is very light, it needs something to hold it.

Q. Wouldn't that brace be subject to being bent in, as the one you talked about a while ago, in case of an accident?

A. No, because the mass of the load carried in this case was very much less.

Q. The mass of the load?

A. If I am not allowed to make an estimation I can't answer.

Q. There the mass of the load is the same as the one you figured on?

A. It could not be located there, there would not be room for this strut, you would not make that construction for the same mass.

Q. You don't mean to say that five times the mass you are talking about could not be put over it, you just mean they wouldn't do it in practice?

A. No, it couldn't be put there because that is not long enough to correspond to that other loading.

Q. You mean if you would put pig iron up there it would not load it much heavier?

A. Oh, yes, but pig iron isn't the same mass as an automobile.

Q. So far as weight is concerned?

A. Oh, yes.

THE COURT: I think, Mr. McNees, we are only talking about automobiles and not pig iron. You ought to keep this case within the pleadings and not go too far afield.

MR. McNEES: That is correct.

(Discussion.)

MR. McNEES: I think we will move on after we make an offer. We offer to prove by this witness the effect of carrying various weights over the cab of the car which have no relation to an automobile, using as a basis for that his knowledge of this situation.

THE COURT: What is the purpose of the offer?

MR. McNEES: The purpose is to show that

the legislature has prohibited in these words the carriage of an automobile and any part of it over the cab: "No person shall operate a vehicle on the highways of this Commonwealth carrying another vehicle, any part of which is above the cab of the carrier and over the head of the operator of such vehicle." Our purpose is to show that mass has nothing to do with it at all, that if a small part of the car is carried over it is entirely illegal.

THE COURT: Do you object?

MR. KEITEL: Yes, I object, your Honor, because I don't think it is covered by the pleadings, and because this witness has testified as to mass and not as to weight. If you want to prove that you certainly cannot prove it with this witness.

MR. McNEES: This witness is an expert.

THE COURT: Objection sustained, exception to the plaintiff.

Q. You did testify as to the exhibits, a picture of chicken coops over the cab, you said that that was a very light weight and could not be compared, are you sure about that, do you know the weight?

A. Each chicken coop would weigh in the neighborhood of 15 to 20 pounds, not more than that, and it would occupy a space of only two cubic feet, because the mass is very small, regardless of the exact dimensions.

Q. Do you know how many coops were carried over the cab on this exhibit?

A. No, I only saw the picture. They could be counted from the picture.

Q. We count thirty, have you any objection to that statement?

A. No.

Q. About what do they weigh?

A. They weigh—well, six or eight chickens perhaps to the crate, that would be 20 pounds additional.

Q. So you think that thirty or forty pounds would cover the weight of one of those crates?

A. Yes, put it in pounds to the cubic foot, 20 pounds to the cubic foot, very small mass in that.

Q. That testimony is like your other testimony, is it; based on the application of theory?

A. No, these are just units that are fixed, that you can apply, there is no theory to it, well known engineering units that you can apply to estimates.

Q. You would not want the rest of your testimony to be measured by the accuracy of that statement as to the weight of these crates?

A. You asked me to estimate, not for an accurate answer, and I made the estimate.

Q. Suppose they weighed more than twice that, what would you say?

A. It might be possible if they were larger than I said they were.

Q. You testified that bulk of a car over the cab, in your judgment, where there were no other cars on at least, would be unsafe; any other commodity of the same bulk located in the same way would be equally effective?

A. Yes, same bulk and mass.

THE COURT: And on wheels?

A. And on wheels.

BY MR. MCNEES:

Q. Do the wheels make any difference in the load?

A. Yes, they make it much more difficult to secure.

Q. You mean if there were four logs instead of four wheels they would be easily secured?

A. No, logs would be as bad as wheels.

Q. Would be worse?

A. Very likely.

Q. They also asked you yesterday about going around a curve and, as I remember it, you used a 100 foot radius there as an example?

A. Yes.

Q. And you said that your one exhibit, Exhibit "JJ", Figure 5, which applied to a car over the cab and no other load on the tractor at all, would show a tipping, or at least a serious danger of tipping at about 25 miles per hour?

A. Yes.

Q. And if you had the load as indicated in Figure 4 that would be increased to about 36 miles per hour; is it correct if you had a 200-foot street at right angle intersection and you were at the right curb as you come down you would turn so that you come within the right curb of the cross street, that you have approximately 100-foot radius?

A. You say a 200-foot street?

Q. 100-foot intersection with another 100-foot street.

A. If you were going over the outside?

Q. Yes, you have a little more than 100-foot radius.

A. Possibly, because the outside wheels would be at the 100-foot radius and the center of gravity of the load at a slightly less radius, to be exact.

Q. No, the center of gravity of the load would be more than 100-foot radius.

A. No, the outside wheels I referred to, because you could not mount the curb.

Q. No, but the center of your circle would not be at the corner, it is on the inside of the corner and a 100-foot radius.

A. Maybe I misunderstand your layout.

Q. If you have an intersection of 2 100-foot streets, in order to have a 100-foot radius for the curve, if the truck was going around that corner the radius would be well within the corner?

A. That is 100 feet that way.

Q. Yes.

A. You were going right on there.

Q. Then the center of such a circle would be right at the corner?

A. If you count the center of gravity it would be somewhat inside.

Q. In such a situation as that you say that the ordinary truck loaded as it is indicated in Figure 4 could make that curve at 36 miles per hour?

A. If everything was perfect.

Q. You never saw a truck or car do that?

A. I have seen cars that you could tell.

Q. You would consider it an unsafe operation?

A. Yes.

Q. Isn't it true you are skidding along before you have the tilting of the load?

A. No, that is not true.

Q. Did you ever see a truck of this sort upset from purely a tilting proposition without skidding?

A. I never saw one of those.

Q. Wouldn't you say that operating this truck with a car over the cab and no other load on it at 25 miles an hour around a corner of that sort would be unsafe operation?

A. That is the limit, that is where the unsafeness begins.

Q. Wouldn't you say, if it never tilted, that would be a reckless and unsafe way to handle a thing of that sort?

A. Yes, certainly.

Q. So that as far as your testimony is concerned anyone operating around that corner in an ordinarily safe way would not involve the point of tilting at all would it?

A. No.

Q. The equipment, and the one car over the cab, which is admittedly a top-heavy situation, is entirely safe for reasonable operation around that curve?

A. For well-marked curves they give the driver plenty of warning, yes.

Q. When you are figuring the center of gravity you figure the center for a car over the top, did you figure the center for the entire equipment, truck and tractor?

A. Yes, I did; I obtained the center of gravity of the car over the cab and the center of gravity for the tractor and combined the two for convenience of calculation. I could have used the two separately if I had wished.

Q. You used the heaviest car?

A. Yes.

Q. Did you use the heaviest tractor that you could find?

A. I used the tractor whose dimensions were given me that would be official so that that would be acceptable here in the court.

Q. That is, you used a figure that someone in the department gave you?

A. At random, I picked up something that fitted into the picture.

Q. You had to have the weight of the tractor?

A. Yes.

Q. Was that an average weight, too?

A. No, the weight is given right on the picture.

Q. Isn't that an average weight tractor, it is not the heaviest tractor you could find?

A. No, that particular tractor, as I understand it, carried those particular cars that are specified.

Q. Did that tractor ever carry the heaviest car over the cab the way you figured it?

A. What?

Q. You didn't figure the weight of the car carried over the cab, you took the heaviest car?

A. I took the heaviest car.

Q. So that as far as you know that tractor never carried that heavier car?

A. If it saw fit to do so.

Q. If that heaviest car would be put on, the car would be too long and it is never carried over the cab?

A. There isn't enough difference between the lighter cars of the same make as that car to cause that difficulty.

THE COURT: That is considered another element of danger, the fact that a car approaching one of those tractors cannot possibly see around it and if they wished to drive around it they would be likely to have an accident?

A. That is true.

BY MR. McNEES:

Q. Why is that?

A. Well, the object is so long, the whole vehicle,

the whole train of vehicles is so long and so broken up.

Q. It hasn't anything to do with the car over the cab, has it?

A. Only that it adds to the obstruction of vision, very often you might see another car coming along.

Q. Can't you see over the ordinary box truck?

A. No.

THE COURT: That is not nearly so long?

A. It isn't so long, no.

BY MR. McNEES:

Q. The height of an ordinary truck is at the back, isn't it?

A. Yes.

Q. You couldn't see over it nearly as well as you could this equipment with this car carried up in the front?

A. Of course, the ordinary truck usually keeps to its side of the road.

Q. If that is the basis of your answer, that is not important.

A. It is one of the considerations.

Q. Tell us another thing: the car over the cab isn't wider than—we will say 16 inches?

A. Yes, somewhere around that, five feet five, or thereabouts.

Q. Is it correct that on any of the square box build trucks are 90 inches wide?

A. That is true.

Q. In your judgment can't you see much more, either above or around the equipment of the type we are discussing than you could on that type of construction?

A. There is a peculiarity of vision that comes in

there, that is, that a broken object is more of an obstruction than a well defined object; that is, a broken outline and I think that perhaps is one of the reasons why people feel as they try to go by these vehicles that they do obstruct the view more.

THE COURT: They are much longer than an ordinary truck?

A. Much longer.

THE COURT: About how much longer?

A. It would run maybe 20 feet longer, 18 feet, somewhere around there.

BY MR. McNEES:

Q. You mean 20 feet longer than the single unit?

A. Than the single unit.

Q. They aren't longer than any other truck and tractor that carry things?

A. Somewhat longer than an oil tank trailer and comparable to other types, yes.

Q. A solid obstruction is 100 per cent. obstruction?

A. Yes.

Q. And a broken one you say makes it more difficult because of confusion?

A. Confusion.

Q. Not that you can't see through it?

A. No.

Q. Do you know how long the equipment that we have been talking about actually is?

A. Not in actual figures.

Q. Do you know how long other trailers and semi-trailer equipment is on the highway?

A. It has to be within the limit of the statutory allowance, which I believe is 70 feet, is it not?

Q. These are within that, aren't they?

A. Oh, yes, they are within the legal limit.

Q. You would not be able to say exactly which equipment is longer, the car carrier or semi-trailer?

A. Some of them, the one type may be longer, some of them longer.

Q. If the carriers are to carry four cars I expect it is obvious that that will be longer, if you take this car off the cab and put it back it has to be longer?

THE COURT: What does that have to do with it? The framework must be there.

MR. McNEES: It has nothing to do with it, it was your Honor inquired about the length of the trucks, although it has nothing to do with this case at all.

MR. KEITEL: The fact that you would be putting four cars on isn't in this case either.

THE COURT: Consider the evidence of danger to the traveling public.

MR. McNEES: Of the car over the cab or part of it.

Q. I show you Plaintiff's Exhibit No. 15 and ask you if any part of the car in that case is over the cab?

A. There is the bumper and the spare tire are over the cab.

Q. None of the calculations you have made, or the testimony you have given, would apply to an equipment of that sort, would it?

A. Yes, the stability would apply to some extent, although not in this case because the whole load is on the trailer.

Q. What do you say as to the safety of operation of that type of equipment?

A. Well, I think it would be pretty good.

Q. Referring to the fifth wheel over the axle or

in front of the axle, I understood you to say that it does make a difference where it is located?

A. Yes.

Q. If located back of the rear axle it will lighten the weight on the front axle?

A. Statically right.

Q. You didn't take that into account however in your computation?

A. No, I considered the four wheels on the tractor alone.

Q. You have made some statement about the fifth wheel generally being over the rear axle, do you mean so far as your observation is concerned or did you make a study of that situation?

A. It is general practice to try to do that, in some cases it is a trifle to the rear of the axle, maybe four or five inches, and in other cases it is a trifle forward. In all these cases they try to keep it forward of the rear axle because that is the better position statically and dynamically both.

Q. That is the best position where you haven't the load over the cab?

A. Yes.

Q. Is it the best position where you have a car over the cab?

A. Yes, I still think so, without question.

Q. Do you think that the construction of all of these trailers is wrong?

A. Oh, they aren't all constructed in that way.

Q. And they have a car over the cab and have the fifth wheel back of the back axle?

A. Beg pardon, I have seen many a catalogue where it is on the rear axle or a trifle forward.

Q. Let us limit it to those where the fifth wheel is back of the rear axle, that is bad construction?

A. Yes, sir.

Q. Than if it were carrying a car over the cab?

A. Yes.

Q. We have testimony of an auto truck here of that type of construction where the fifth wheel is back of the back axle, that it was safer to carry the car over the cab than not to carry it there; what do you say about that?

A. Well, that is using a remedy that is not a good one, I would say.

Q. You would want to change it to the fifth wheel?

A. Yes.

THE COURT: That testimony, as I recall, Mr. McNees, is that the added weight aided the driving of the car, as to the driving on the road, that is what I gathered from that testimony some time ago, but I am only speaking from recollection.

MR. McNEES: As I remember it, certain drivers testified that they did not want to drive the equipment without the car over the cab if they had that heavy load on the rear, behind the rear axle.

A. Yes.

THE COURT: On account of the elevation on the road?

MR. McNEES: Yes.

Q. If we used the construction of the fifth wheel back of the axle should that be counterbalanced in some way by a weight forward?

A. Of course personally I condemn that type of construction because it violates so many physical considerations.

Q. Do you know anything about the accident fre-

quency with equipment of the type which we have been discussing?

A. No; I have never seen any figures on that.

Q. You say you don't know the accident frequency on this type?

A. No.

Q. If we should tell you that there was evidence or figures showing that it is the lowest accident frequency for 100,000 miles than any ordinary equipment operated over the road, would that affect your judgment as to safety?

A. I think that the figures applied to the cargo is not quite fair because some of these tractors violate the condition of the law and a great many more do not, so that if you apply the accident figure to the cargo I don't think it is fair to guess.

Q. You haven't any explanation of the accident frequency of this type of equipment, have you?

A. I think from some of the testimony I have heard it is very apt to go out of control on small deviations to avoid another car, or something of that sort. That has appeared in the testimony that was the result, an accident.

Q. Isn't it true that your statement that this weight over the front wheels tends to keep the equipment in a straight line, isn't that just as much a safety factor as unsafe?

A. No, because it makes the car difficult in trying to steer.

Q. Aren't accidents caused by running off the road?

A. Yes.

Q. Wouldn't this car have a tendency to stay on the road?

A. No, because if the driver saw danger and wished to make a turn he would attempt to steer and

the result would be an oversteer and he would go off the road.

Q. On all straightaways we will say, there will be a safety factor in the tendency to keep the load moving straight?

A. No, you want flexibility of being able to turn.

Q. If you don't want to turn?

A. We are speaking of an automobile and not a projectile.

Q. What I am talking about is moving down on a straight highway the tendency to keep the load straight would be a safety factor, wouldn't it, ordinarily?

A. I don't get the reasoning in that because an automobile equipment must be maneuverable safely, there is nothing in it to keep it in a straight line that would make it safe, any such tendency would not make it safer, no.

Q. Are you familiar with the new equipment that is put on the cars?

A. Yes, I have seen a description of it.

Q. The purpose of that is to keep it in a straight line in case of an accident?

A. Yes, but not all accidents are caused by going in a straight line.

Q. I have limited the question to that, on a straight highway isn't the tendency to keep your load straight a safety factor?

A. In the case of a blow-out or some such exigency as that I will agree with you, yes.

Q. Do you know that by far the largest percentage of accidents are on straightaways, straight sections of highway?

A. Yes, caused by skids, and sudden deviation that the driver attempts to make.

Q. Those accidents would be avoided, to a large

extent, by having your equipment tending to go straight, wouldn't it?

A. No, because you are limiting your maneuverability, and if it is safe going straight it is unsafe when you want to make the turn.

Q. You have just said it is the sudden deviations on those straight roads that make it difficult, this equipment will not have that tendency?

A. The deviations come from the driver and it is his will in the matter, or his lack of will in the matter.

Q. In these cases he cannot make those deviations as quickly as he could with most equipment?

A. He would make the effort and the result would be an oversteer.

Q. I show you Plaintiff's Exhibit "G", which has among the designs on it one with Model "C", in which apparently the car is carried over the cab without the weight on the cab, is that the impression you get from Model "C"?

A. Yes, it is carried on a cantilever support there from the trailer in the rear.

Q. Now that car is well out over the cab, isn't it?

A. Exactly.

Q. With no weight there at all?

A. No.

Q. Would your calculations be applicable to that kind of a situation?

A. Yes, because whether the weight rests actually on the cab, the center of gravity is in the same line.

Q. Does that affect the steering?

A. Yes, certainly, because this weight working downward, will transmit it through the chassis. If this king pin is over the rear axle it will not.

Q. So that makes no difference?

A. No.

Q. If the king pin is back of the rear axle it would lighten it?

A. Yes.

Q. And if the king pin is in front it will make some difference in the weight?

A. Exactly.

Q. Of course you could not in any way apply your calculations to this type of equipment?

A. No.

Q. We refer your attention to Exhibit 10, a large blueprint, on which there seem to be four wheels in front, isn't there shown on that blueprint four wheels in exactly the way you must show them to show front elevation of any truck if the back wheels were outside of the front?

A. Yes, it would be.

Q. It didn't indicate to you that there were actually four wheels in front?

A. I can't remember offhand. They tip, which would not be probably if there were two wheels in front.

Q. That is correct.

A. That is the rear wheel and the front wheel is not shown because that it attached to the rear wheel, or front wheel, whichever it is.

Q. The representation as a front elevation of the truck, that is correct, isn't it?

A. Yes.

Q. I don't mean the figuring.

A. No.

Q. As to Exhibit 9, you spoke of some inaccuracy as to the tipping angle; isn't it true in your calculations you figured—what was it—of the top vehicle and lower vehicle, as just the same?

A. No, top 3500 pounds and the lower 4200, approximately.

Q. Is the weight of the truck large enough to carry two cars and the semi-trailer carrying one?

A. In heavy type trailers such as this specifies.

Q. In the testimony I think you said that the weights of the upper and lower cars were the same; if that is so, that would be an accurate statement?

A. Yes.

Q. May I ask you again, if I haven't, whether all of your calculations were based upon assumed figures or figures from photographs or figures given you—you made no actual measurements in any case?

A. No, I made no actual measurements, I obtained the figures where they were obtainable.

Redirect Examination

BY MR. KEITEL:

Q. I want to ask you about some of these drawings. Plaintiff's Exhibit 10, which shows a front view with four wheels visible; if the outside wheels were on the rear of the equipment would that be a correct picture of the tipping angle?

A. No.

Q. What wheels would you have to see?

A. You would have to see the front wheels, single forward wheels.

Q. They are the inside wheels on that drawing?

A. Yes, presumably.

Q. On Plaintiff's Exhibit "3-G", referring again to Model "C", about which you have just testified, would your calculations as to the force applied to the car over the cab in the event of an accident be correct?

A. Perfectly; yes, sir.

Q. Would anything you had to say with reference to obstruction of vision be correct or incorrect whether or not the weights rested on the cab?

A. No, it has nothing to do with the weight on the cab.

Q. If the cantilever construction were broken, what would happen to that car on top of the cab?

A. It would catapult forward over the nose of the tractor.

Q. Referring to Plaintiff's Exhibit 15, are your calculations as to the force exerted on the car partially overhanging the cab applicable there?

A. You mean in the case of center of gravity and balance?

Q. No, I had in mind in case of an accident.

A. Oh, yes, just the same, it would catapult forward.

Q. Where would it eventually rest if that did happen?

A. Depending upon the severity of the collision it would either come down on the hood of the trailer or catapult forward and to a mid-line object.

THE COURT: Do any of these questions and answers now assist the Court? You are just making up a record.

MR. KEITEL: We are assisting the Court in showing just what calculations apply and what do not.

THE COURT: I know. Certain things are accepted. If there were a collision and the chains were broken we all know where the car was going; it would fly out into space and out into the road. Now there are certain mechanical laws that the Court knows without testimony.

MR. KEITEL: All right, your Honor, we will limit ourselves to just a few more questions on this subject.

Q. Referring again to Plaintiff's Exhibit 3-G, did you ever see a copy of this?

A. No, I never have before.

Q. Did you ever see a chart like this?

A. Yes, several.

Q. Can you indicate any models on there where the car is over the cab where the fifth wheel is not back of the rear axle of the tractor?

A. Yes, there is one, Model "T", Model "TT", Model "DL", Model "LT", Model "C"—that one is not clear, Model "F". There are some of them that are not quite clear on the drawing.

Q. Referring to this graph of yours, our Exhibit "JJ", did you take into account any factor such as the condition of the tires, the condition of the street, the crown of the highway?

A. No, that is under perfect conditions.

Q. Would those conditions have any effect?

A. Very serious effect.

Q. What would happen to the curve on this graph—

THE COURT: Are you informing the Court or making up a record? The Court knows all those things.

MR. KEITEL: Mr. McNees on cross examination intimated that it was unsafe for anybody to go around the corner.

THE COURT: That is so, but how is that going to affect what the Court is going to do?

MR. KEITEL: If we felt that the witness had convinced the Court fully of our position—

THE COURT: I understand your position.

MR. KEITEL: One more question. I wish to ask, your Honor.

Q. The computations as to equilibrium, centrifugal force, et cetera, were they based on mass or weight?

A. Mass and weight, the two together. The weight is the information you get and you transfer that into mass to weigh it in the force formula.

Q. What is the difference?

A. The weight is the avoirdupois that we all are able to appreciate, and mass is that weight divided by the acceleration or gravity.

Q. This new equipment that is referred to, do you know whether or not that operates—

A. It is a steadying piece of equipment at all times, and it simply locks, to that it can't deviate quickly.

Q. Are you now or were you at any time ever employed by the Commonwealth of Pennsylvania, except as a witness for the purposes of this case?

A. No.

Recross Examination

BY MR. McNEES:

Q. May I ask you whether in reference to the location of the fifth wheel in Model "F", No. Model "LT" of those to which you have referred, do not carry a part of the car over the cab?

A. Yes, they do.

Q. One more thing: would your calculations be exactly the same as to the movement of this type of car if there weren't any car over the cab?

A. Yes, but for instance, if we were using a cab-over-the-engine car and we had the car in approximately the same position, except to the rear

of the cab, at that height it would apply, but there would be some variation on account of the center of gravity being somewhat to the rear.

Q. The new trucks that are made now with the cab over the engine, these bullnose trucks, on that type of equipment the same force generally as to forward movement would apply?

A. Yes.

Q. And particularly with reference to Exhibit 15, if that car nearest the cab was a foot or two farther so that it didn't violate the law, the same safety factors would be involved, wouldn't they?

A. With the exception that you have a large stability base, because you are over the dual wheels.

Q. You have a little more of a load back there?

A. It is all back over the dual type equipment. In this case these are dual tires.

Q. But the forward movement would be the same.

A. The forward movement would be the same.

Q. The strength of the chains would have to be the same?

A. The strength of the chains would have to be the same.

Q. The car would go just as far?

A. Yes.

J. R. DUPLANCHE, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

Q. Mr. Duplanche, what is your business?

A. Manager, New Car Carriers, in Chester.

Q. Do you have this equipment designed to haul automobiles?

A. Yes, sir, we do.

Q. Is any of it designed so that any part or all of the car that is being carried is over the cab?

A. Some of them.

Q. Do you operate any lines between Philadelphia and Chester?

A. Yes, sir.

Q. Where do you get the cars?

A. Get them all over the state, most of them at Chester.

Q. Where do you get them from, what point in Chester?

A. Ford Motor Company.

Q. Is that a factory?

A. That is a factory.

Q. Where do you deliver them?

A. How is that?

Q. Where do you deliver the ones you get in Chester at the Ford factory?

A. Deliver them all over.

Q. In Philadelphia?

A. Some of them in Philadelphia, Ford dealers.

Q. Any other points in Pennsylvania?

THE COURT: Some in Harrisburg?

A. All over the State of Pennsylvania.

Cross Examination

BY MR. McNEES:

Q. You were an operator?

A. I have been with this company about a year and a half.

Q. Do you know about your accident frequency as between the—

MR. KEITEL: We asked this man nothing about accidents.

MR. McNEES: All right.

W. L. WOLFORD, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

MR. McNEES: If the Court please, there is apparently an error in the testimony, either the statement of the witness or in recording it, on page 80-D, as originally paged, or on page 175 as now paged, the second question on the page under the testimony of S. H. Alpert:

"Q. With what firm are you engaged?"

The answer in the record is:

"Aetna Mutual Indemnity Company, New York." It should be Auto Mutual Indemnity Company of New York, we should like to have that corrected.

THE COURT: Any objection?

MR. KEITEL: No, your Honor, that was necessary because of my request.

By this witness we wish to prove that this company is not likely to do business in Pennsylvania.

MR. McNEES: Of course we object, if the Court please.

THE COURT: What is the purpose of that?

MR. KEITEL: Mr. Alpert, the representative of the company, was here to testify on behalf of the plaintiffs, presumably to show that their accident operation is satisfactory. We

asked Mr. Alpert whether he would insure Maurer & Myers and except for the fact that— I have forgotten what the exception was, but he said he would. Well, he could not have, and he knew very well that this company was not permitted to do business in Pennsylvania, he must have known it. We think this not only goes to the credibility of that witness as to his testimony, but also to any inference that might be derived from his testimony. We will be very brief on this point.

Q. Mr. Wolford, what is your occupation?

A. Chief Auditor, Division of Statements and Audits, Insurance Department of the Commonwealth of Pennsylvania.

Q. As such are you acquainted with insurance companies licensed to do business in Pennsylvania?

A. I am.

Q. Have you ever heard of the Auto Mutual?

A. I have.

Q. What is its present status in Pennsylvania?

A. The license of the Auto Indemnity Insurance Company of New York has been revoked.

Q. Why was it revoked?

A. It was revoked because they failed to maintain an adequate surplus.

Q. Is it a New York corporation?

A. Incorporated under the Insurance Laws of the State of New York.

Q. Was the information of the Insurance Commissioner of Pennsylvania based on his own action or on something else?

A. It was based as the result of the examination made of the affairs of the company.

Q. By the Pennsylvania Insurance Department?

A. By the Insurance Department of the State of New York.

Q. Has the license of this company ever been suspended before the revocation?

A. It has not, it was temporarily suspended.

Q. Can you give me the dates of the temporary suspension?

A. Temporarily suspended on September 16, 1937.

Q. When was it revoked?

A. Definitely revoked September 23rd, 1937.

Cross Examination

BY MR. McNEES:

Q. Do you know whether or not registration in Pennsylvania is necessary in order to carry insurance on interstate vehicles?

A. It is necessary.

Q. When was that order made by the Insurance Department?

A. It was during 1935 Legislature, I think. I am not absolutely certain of the date but I think it was during 1935.

Q. That is, that all equipment operating in interstate traffic in Pennsylvania must be insured by a company registered in Pennsylvania?

A. That is right.

Q. Did you know at the time Mr. Alpert appeared here that he was here?

A. Beg pardon?

Q. Did you know that Mr. Alpert was here when he appeared at the last hearing?

A. I didn't.

Q. Do you know whether there was any qualification at all for a motor truck moving in Pennsylvania in interstate commerce before the Motor Company Act?

MR. KEITEL: I don't believe that is within the scope of my examination either.

THE COURT: He was called on the question of insurance, as I recall it.

MR. McNEES: On general qualifications.

MR. KEITEL: What?

THE COURT: On qualifications of what?

MR. KEITEL: Your question was on qualifications of motor carriers.

MR. McNEES: What I intended to show, if I could, was that any motor truck could operate in interstate commerce in Pennsylvania at any time without any insurance requirements so far as Pennsylvania is concerned, and they have no means of checking it and did not check it.

THE COURT: Is that true?

A. I don't know.

MR. KEITEL: We admit that insurance is irrelevant in this case, the plaintiffs brought it in.

THE COURT: And if they brought it in and you admit it I think we do not need to take any more time in hearing testimony.

Redirect Examination

BY MR. KEITEL:

Q. Mr. Wolford, in your official duties would you know in what states this company is authorized to do business?

THE COURT: What company now are you talking about?

MR. KEITEL: The Auto Mutual Indemnity Insurance Company.

THE COURT: What has that got to do with this case?

MR. KEITEL: They had their man here to testify that he insures these people.

THE COURT: Suppose they did?

MR. KEITEL: Suppose they cannot insure anybody?

THE COURT: How would that help us?

MR. KEITEL: That would mean that their testimony has no validity in this case.

THE COURT: Suppose it was not?

MR. KEITEL: I admit that it was not.

THE COURT: That is the end of it, do not prove what you admit.

MR. KEITEL: This is rebuttal.

RAYMOND A. BLYTHE, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

Q. Mr. Blythe, what is your position?

A. Private in Pennsylvania Motor Police.

Q. Where are you located?

A. Sharon, Pennsylvania.

Q. I show you three pictures marked Defendant's Exhibit "Y", Defendant's Exhibit "Z" and Defendant's Exhibit "AA", and ask you whether you can identify those pictures?

A. Yes, sir.

Q. Now what do they represent?

A. Exhibit "Y" and Exhibit "Z", are pictures of a Buick Sedan which was involved in an accident on Route 20 in Erie County on day of March 13, 1936, Exhibit "AA" is a picture of convoy which also was involved in the same accident.

Q. How do you know that these were involved?

A. I have a recollection of the accident and I have an accident report submitted at the time of the accident which covers the accident.

Q. I also show you Defendant's Exhibit "BB", which has been admitted into evidence and ask you what that shows?

A. That is a picture of the location of this accident.

Q. Now will you describe your connection with this accident?

A. You refer to the cars?

Q. From beginning to end.

A. Well this accident happened in the evening about eight o'clock on a very very bad winter night, the road was very slippery, the Buick Sedan, pictures by Exhibit "Y" and "Z", was proceeding west while the convoy, loaded with Packard automobiles, was proceeding east. This accident occurred near the bottom of an "S" curve, the Buick, from the driver of the convoy I was informed—

MR. McNEES: You don't know.

A. No, I didn't witness the accident.

MR. McNEES: I think we have had a good lead about this accident already?

THE COURT: I know we have.

Q. Just state what you saw when you got there?

A. When I arrived at the scene of the accident the Packard car, which had been riding above the cab of the convoy, had been thrown forward by the impact and it was resting, or rather one rear wheel

was resting on the top of the Buick Sedan and formed a body between the convoy and the Buick which it collided with. The car had been riding with the rear end facing the front end of the convoy and when the cars crashed it was thrown forward and the left rear wheel of the Packard was resting on top of the Buick, while the right rear wheel was suspended in mid air.

Q. Did you have any conversation with the driver of either car?

A. I did with the driver of the convoy, the operator of the Buick was unconscious, he died without regaining consciousness.

Q. Are you sure that the Buick shown on Exhibit "Y" and "Z" was the Buick that was in this accident?

A. Yes, sir, positively.

Q. How did you know?

A. From the information I took at the scene of accident, I incorporated it in my accident report.

Q. Does it look like the Buick?

A. Yes, sir.

Q. Did you make a note of the license number?

A. Yes, sir.

Q. Does that correspond with this one shown on the picture?

A. Yes, sir, it does.

Q. Are you sure that the convoy shown in Exhibit "AA" was the convoy involved in this accident?

A. Yes, sir.

Q. Was it loaded or empty at the time of the accident?

A. It was loaded, it had three cars on it at the time of the accident.

Cross Examination

BY MR. McNEES:

Q. In the testimony which preceded yours a witness said he was not sure whether the wheel of the Packard was on top of the Buick, or whether the structure of the convoy was over the top of the Packard with wheel on top of the plate, are you sure about that?

A. Yes, sir definitely.

Q. That is the plate of the convoy carrier wasn't over the Buick?

A. No, as I say, the Packard was thrown forward and two front wheels resting in the runway here and still remained on the runway of the convoy, the left rear wheel was on the top of the Packard resting directly above the rear side and the right wheel suspended in mid air.

Q. The Packard wheel was on top of the Buick, at the back of the Buick?

A. Yes, almost directly by the rear seat.

Q. From your experience in matters of that sort and your observation at this time could that have had anything to do with the injury of the driver?

A. The driver of the Buick?

Q. Yes.

A. No, I wouldn't say that it did.

ALBERT H. SHULLER, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. KEITEL:

MR. KEITEL: Before examining this witness I offer into evidence Defendant's Exhibits

"Y", "Z" and "AA", which were previously offered but rejected because they were not connected with the case; I now renew my offer of these exhibits in evidence.

MR. McNEES: I think the objection was because they were not able to identify them; that I think has now been done and we do not object to them.

THE COURT: Very well, they are admitted.

Q. What is your official position?

A. Sergeant, Pennsylvania Motor Police.

Q. Where are you located?

A. Myerstown at the present time.

Q. Are you familiar with the auto convoys that are the subject of this case?

A. Yes, sir.

Q. Have you ever made any examination of the runways of any of these convoys?

A. I have.

Q. State where you made such examination and under what circumstances?

A. In the vicinity of York Haven, Mr. Lesley Reeser, I believe, was engaged in this convoy or transporting of automobiles. I stopped at his garage one afternoon, I believe it was October 12, at the time I came to the garage he wasn't at his place of business. There was an attendant there said that he had gone out, he would be back shortly, and while looking around the garage there were two of the truck tractors and semi-trailers of the type we have been discussing, where the cars were carried over the cab. I was checking over the one truck tractor and semi-trailer and Mr. Lesley Reeser came to the garage and I asked him if he was Lesley Reeser: he said he was. While I was checking over the truck tractor and semi-trailer I noticed that

there had been several re-welds and crack-welds on the framework of the runway and of the tractor. I called it to his attention, that is Mr. Reeser's and asked him whether or not he knew about it. He said he did and I had asked him whether or not he had done his own welding or whether he had it done elsewhere. He said some of it he had done in York, most of it he had done himself with an electric welder at the time. He said however that these cracks in the structure are caused by the empty convoys, by the vibration on the road. He then accompanied me while I checked over the other structure on the other convoy, that is the carrying equipment over the cab. We noticed there had been a crack on the base of the righthand side of the vertical support and the first one that I had checked over there was a re-weld on the angle iron, down to the right rear of the overhead structure, and there was a crack on the weld at the base of the rear left support.

Cross Examination

BY MR. McNEES:

Q. You say he told you that this resulted from operation empty?

A. Yes, sir, the vibrations on the road.

REBUTTAL

GEORGE H. WELLINGTON, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Wellington?

A. Washington, D. C.

Q. What is your present business?

A. Assistant Chief, Section of Safety Bureau, Motor Carriers, Interstate Commerce Commission.

Q. Are you familiar with what we call ex parte No. MC 15, issued by the Interstate Commerce Commission?

A. Somewhat.

Q. Do you have a copy of it with you?

A. I have, sir.

Q. I show you Plaintiff's Exhibit No. 28, and ask you if that is a copy of the order to which we have just referred?

A. This is, yes.

Q. Is it correct that that order after the title, refers to certain sections of the Motor Carrier Code?

A. It does.

Q. What are those sections?

A. Section 204-A, 1, 2 and 3, and Section 225.

Q. May I ask you, since they are short, that you read into the record Section 204-A-1?

MR. KEITEL: Isn't that already in evidence?

MR. McNEES: Yes. If it is more convenient for the Court we will just read it into the record.

A. Section 204-A. "It shall be the duty of the Commission.

"1. To regulate common carriers of motor vehicles as provided in this part and to that end the Commission may establish reasonable requirements with respect to continuous and adequate service in transportation of baggage

and express, uniform systems of accounts, records and reports, preservation of records, qualifications, and maximum hours of services of employes and safety of operation and equipment."

Q. May I ask you whether or not the Interstate Commerce Commission has undertaken to investigate the question of sizes and weights of truck equipment under Section 225 of the Motor Carrier Act?

A. I would say that the Commission had done so by the issuance of this order, Ex Parte No. MC 15.

Q. In the paragraph immediately following that in which the sections we have referred to are set forth, do you find that the Commission has instigated an investigation and will you read those two lines, beginning "It is ordered"?

A. "It is ordered that investigation be and is hereby instituted into the above described matter for the following purposes."

Q. Now the purpose just following that statement—

MR. McNEES: If the Court please, they are on the exhibit, we will not ask to have them read.

Q. Do you happen to know whether any hearings have been held yet under this order?

A. No hearings have been held as yet.

MR. KEITEL: Mr. Wellington, you are not testifying upon anything in addition to this ex parte order MC 15, are you?

A. I am not, sir.

JACK S. COSTA, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. McNEES:

Q. Will you give your name to the reporter?

A. Jack S. Costa.

Q. Where do you live?

A. At Toms River, New Jersey.

Q. What do you do?

A. In the convoy business.

Q. Do you drive a tractor?

A. Yes, sir.

Q. Drive a convoy yourself?

A. Yes, sir.

Q. Have you ever driven convoys with a car over the cab?

A. I have, sir.

Q. How long have you been driving convoys of one type or another?

A. Five years.

Q. Will you tell us, roughly, how much of that experience has been with a convoy with a car over the cab?

A. For the past five years.

Q. Altogether that type of equipment or some other?

A. Off and on, I change over from different types of truck.

Q. Would it be safe to say that nearly all of your experience is with a car over the cab type?

A. Yes, sir.

Q. Do you know how far you have driven in that time?

A. Yes, sir.

Q. How far?

A. I will say roughly several hundred thousand miles.

Q. What has been your own accident record?

A. None whatsoever.

Q. In all that time?

A. No, sir.

Q. Has your record been investigated in any way, do you have any evidence of that statement?

A. Yes, sir, I have.

Q. What is that?

A. The Governor of the State of New Jersey, Harold G. Hoffman, has just presented me with a State card and also a letter issued through the Motor Vehicle Department of the State of New Jersey, commending me for 500,000 miles in four years without a reportable accident to the Motor Vehicle Department.

Q. Do you consider this over the cab type of equipment as safe equipment?

A. I do, sir, in fact far superior to a lot of other equipment that I have seen on the highway.

Cross Examination

BY MR. KEITEL:

Q. Isn't it true that a lot of other drivers got State cards from the Governor?

A. No, sir, there are very few.

Q. About how many?

A. Well that I couldn't answer, it depends upon the ability of the driver.

Q. It is an honor then seldom conferred, is that correct?

A. That is right, sir.

Q. You are still today engaged in the convoy business?

A. I am, sir.

Q. I believe you have said, or did you say that ability to drive this equipment safely depends on the ability of the driver?

A. I did, sir.

Q. Would the driver's vision have anything to do with it?

A. Well yes and no.

Q. How far over the cab is the car on the equipment you drive?

A. Well I have driven all types.

Q. Have you driven them so that they extend beyond the end of the tractor?

A. Yes, sir.

Q. Can you see red lights and trees as well as on those that do not extend beyond the cab?

A. I can, sir, I have mirrors placed around on my truck at various points where I can see coming on the right side from the rear or on the left and I have mirrors placed on the truck where I can also see lights up ahead of me if I get too close to the traffic light.

Q. Did you invent those mirrors?

A. I put them on myself.

Q. Tell me this: could a puny man drive one of those things—a puny man, a man without strong muscles?

A. Well I have lots of lightweight drivers, lighter than I am, driving some equipment.

Q. Would you say it ordinarily takes a fairly strong man?

A. Medium sized man.

Q. Or what is more important, a smart man?

A. I would say a man with common sense, he will not necessarily have to be smart.

Q. Will you admit that not everybody could drive those?

A. I do, sir.

Q. Will you admit it takes more skill than to drive an ordinary truck?

A. I do.

Redirect Examination

BY MR. McNEES:

Q. Do you think it requires more skill than to drive an ordinary tractor and trailer equipment with a load on?

A. No, sir.

Q. Do you know of any accident in all your experience caused by the fact that a car was carried over the cab?

A. I don't sir.

MR. McNEES: We have no other witness that we can finish within a short time. We have plenty of them here but they would take much longer than I think we could sit.

THE COURT: Adjourn the court until two o'clock.

At 12:37 P. M. Court adjourned until 2 o'clock, P. M.

Harrisburg, Pa., December 31, 1937, 2 P. M.

IRVING H. JUDD, having been duly sworn according to law, was examined as follows:

Direct Examination

BY MR. McNEES:

Q. Where do you live, Mr. Judd?

A. Dearborn, Michigan.

Q. What is your business?

A. In charge of the Engineering Department, Trailer Division, of Whitehead & Kales Company.

Q. Whitehead & Kales make automobile carriers?

A. Yes, sir.

Q. Does the company make anything else?

A. Yes, sir, they make Ford trailers, industrial trailers, general manufacturers.

Q. Is their principal business making some sort of automotive equipment or trailers?

A. Not principally, they are also steel fabricators of buildings.

Q. Do you know the names of any other companies that make equipment of the type we have been discussing?

A. Chester Mechanical Handling Manufacturers.

Q. Is there any other manufacturer that makes considerable number of carriers?

A. Those are the principal two, they make the bulk of the equipment.

Q. Do you know of your own knowledge whether there are a number that are homemade, what we call homemade, made by operators themselves?

A. There are a number that are homemade.

Q. Have you been here during the testimony in this case during the last day?

A. Yes, sir.

Q. Have you looked at the exhibits, in fact, so that you know in general the type of equipment we are talking about when we refer to carriers having a car or a part of a car over the cab?

A. Yes, sir.

Q. Does your company make any of that equipment?

A. They do.

Q. Have you had anything to do with the designing of it?

A. I have.

Q. How long have you been engaged in that work?

A. Been with the company about 17 or 18 years.

Q. How long have you had the responsibility of designing this type of equipment?

A. Ever since the introduction of this kind of equipment was put on the highway.

Q. Can you tell us just very briefly some of your former educational requirements outside of the practical field, your college and degrees, if any?

A. I am not a college graduate, I have had private tutorship and have taken special courses from time to time and given myself a knowledge of engineering, structures of this type.

Q. Are you responsible for the safety and the general structural parts of the equipment your company turns out?

A. Yes I am.

Q. Have you prepared any exhibits that you think would be helpful to the Court in connection with this type of equipment?

A. Yes I have, in referring to the type that has been introduced in this case, namely, of the four-car truck and trailer combination, where there are two cars on the truck, one over the cab and one back of the cab, and two on the trailer. It is believed that the general impression is that the center of gravity, and particularly of the truck with

the two cars on it, is much higher than it actually is.

Q. Is the location of the vertical center of gravity important?

A. It is very important in respect to the possibility of tipping it over on the highway or around curves.

Q. If it is too high it is dangerous and if it is low it is safer?

A. That is correct.

Q. Do you know anything about the location of the center of gravity as to other general equipment operating on the highways, as well as that which you have designed?

A. I do.

Q. Will you tell us what you have in mind?

A. To determine the center of gravity of the tractor I have shown a Dodge model RH 47 Tractor having 159 inch wheel base. I started to say I have taken a Dodge tractor RH 47 Model, which we in the manufacture of these vehicles have used more than any other, in fact that particular model of truck, year 1938. However, the 1934, 1935, 1936 and 1937 models of the Dodge Tractor, as far as the frame structure is concerned, are the same as those, RH 47, the earlier models were known as AK 46.

Q. Do you have any picture of the Dodge model with you?

A. The Dodge model, a piece of advertising literature that is put out by the Dodge Motor Truck Company covering specifications of the tractor and the uses for which they are recommended. Now I attempted to try by various simple and accurate means to determine in simple form the center of gravity of the tractor with a ramp as we manufac-

ture it to hold the two cars on it, as shown on these photographs.

Q. I show you Plaintiff's Exhibit No. 29 and ask you if that is the type of truck to which you have just referred?

A. That is right.

Q. Of this type of superstructure for the carrying of cars about which you are going to talk?

A. That is right.

Q. I show you also Plaintiff's Exhibit No. 30 and ask you if you spoke with reference to that type in your testimony?

A. I did.

Q. It shows the same truck and the same superstructure?

A. That is correct.

Q. Do you have any blueprint known as SK 3159?

A. To attempt accurately to determine, as I stated, the center of gravity of a tractor plus the structure that we put upon it, this unit was taken and put on a pair of scales, as shown in the photograph, weighing scales, to determine the actual loads at the point of the wheels on which all the weight comes, that is the front axle and rear axle wheels, the loads are determined as shown on Exhibit No. 29, the tractor is on the level and the weights taken, which, as shown on blueprint SK 3159, gave the load on the front axle of 3,090 pounds, and on the rear axle of 3560 pounds.

Q. That is unloaded?

A. That is unloaded. This is just for the purpose of determining the center of gravity of the units shown on the photograph. Now the horizontal center of gravity from these weights is just

obtained by taking a simple proportion of the relative scale weights of 3,090 pounds and 3560 pounds to the wheel base. In other words, the total of the two loads, that is the front and rear axle load, combined, making a total of 6650 pounds, which on a simple proportion basis is to the 3,090 pounds as 159 inch wheel base is to the horizontal center of gravity, or 74 inches. That determines the location of the horizontal center of gravity as the tractor rests level upon the ground. Now I take the same tractor unit, as shown in Exhibit photograph 30, resting the front end of it on the ground and having the rear wheels resting upon the platform and scales only, just the rear wheels only and obtained the weight thereof, which weight in this case, is 3790 pounds, as shown on sketch 3159. That leaves the front axle load of 2860 pounds and by the same proportion methods as are used to obtain the horizontal center of gravity of the job on the level we take the horizontal center of gravity line 74 inches from the rear axle and where that strikes a point of the same line as shown in the upper view of sketch 3159, where those two lines coincide is the true center of gravity of the combined vehicle, of the tractor with the ramp on it. This is a very simple method of obtaining it and a very accurate method, there is no estimating on it, they are scale weights, so that there should not be any question about that being the center of gravity of a combined unit, or as the accurate center of gravity. Along with this—or I should say, after that has been determined the next thing to do is to determine the combined center of gravity with the complete load, with the two cars on the tractor unit, for the reason that they are three separate and distinct bodies, which have a dif-

ferent center of gravity.

Q. Do you have a blueprint that illustrates what we are about to discuss?

A. Yes, that is SK 3163. I should have stated that on Exhibit 31 the actual center of gravity by that method is 34⅛ inches up from the ground line and 74 inches in from the rear wheel. Blueprint SK 3163 shows that center of gravity of the tractor with the ramp structure upon it as 33 inches instead of 34⅛, and the reason for that is that with the car-load upon it the spring deflects approximately two and one-half inches, and we cut that in half, lowering the center of gravity an inch and a quarter, to 33 inches.

Q. You say that because the load is on it and disregarding the load on the tractor, the center of gravity of the truck is lowered a little bit?

A. Yes, sir.

Q. To what figure?

A. To 33 inches. Now the center of gravity on the cars shown on this blueprint, SK 3163, from the ground, that is the vertical center of gravity of the car, it is according to the engineering department of the Chrysler Motor Car Company, is between 25 and 26 inches for their various types of cars. Of course larger cars have a higher center of gravity and the smaller ones lower, and so assuming generally the figure for the 3200 pound cars shown on this print of 25 and three-quarters above the ground, this height is reduced a trifle by the fact that the cars upon the trailer as hauled are pulled down approximately three inches.

Q. By the chains that hold them on?

A. By the chains that hold them on, and we have cut this in two, or reduced the center of gravity

height to 24¼ from the ground. The horizontal center of gravity of the cars, according to the Chrysler Engineering Department, without the passengers in the car, is very close to the half way distance between the hubs of the car itself and taking the figures on this as the center of gravity of the car we have introduced them upon this print SK 3163 and for the purpose of transmitting these three centers of gravity, that is one center of gravity for each of the two cars and the center of gravity of the tractor with a ramp on it to one common center, by taking moments about the horizontal axis on the one hand and determining the horizontal center of gravity of axes on a vertical axis taking moments about a certain vertical axis to determine the vertical center of gravity to get a common center, which tabulation of figures is on a sheet of paper here, that you can mark as Exhibit 32. Now after taking these moments and determining one common center of gravity for the combined three bodies, getting the location of the center of gravity for combined units 47¼ inches from the rear axle of the tractor and 50½ inches above the ground. This puts the weight distribution on the front axle as shown on Exhibit 32, the figures in Exhibit 32, 4560 pounds on the front axle and 10,816 pounds on the rear axle. I believe this to be about the most accurate way to determine actual center of gravity in the combined units as shown in this plan 3163.

Q. So that we all understand it, this print refers to a tractor with the car over the cab and one on the chassis at the rear of the cab?

A. That is right.

Q. Your center of gravity that you have just

referred to as being vertical center being 50½ inches high, includes the whole mass?

A. The whole mass, composed of the two cars, the Dodge truck with the structure as we manufacture it upon it.

Q. Do you have anywhere any comparable figures for the center of gravity of other trucks not carrying cars over the cab?

A. Yes, I prepared a drawing of the same tractor, taking exactly the same tractor, with a 13-foot stake rack body, which the Dodge people manufacture and sell as a commercial piece of equipment, as described in this Dodge folder here, as a fair comparison, in order to make a fair comparison of a commercial piece of equipment, which I believe is considered a safe piece of equipment, operated on the highways all over the country.

Q. It is in general use?

A. And in general use.

Q. What blueprint number is involved in that testimony?

A. SK 3165.

Q. Marked Plaintiff's Exhibit No. 33.

A. The only reference I want to make to it is that the Dodge Motor Car Company manufacture this same truck as a commercial piece of equipment on 13-foot stake rack body, which is shown on this SK 3165. Now the gross weight of the unit shown on Exhibit 32, where there are two cars on the truck, is 15,376 pounds. Now on Exhibit 32 I attempted to take the same gross weight on the same tractor as a comparison and figure the center of gravity for a standard truck from that same gross weight used for hauling the cars, and these figures are determined on another sheet, which we can mark

Exhibit 33. First taking the tractor alone as a separate body, without any load upon it, or any platform, just taking the truck chassis, or the cab, and determining the center of gravity by the same means as we determined it with the ramp structure for the cars as shown on print SK 3167. That print covers scale weights, front and rear axle weights, to determine center of gravity accurately for just the chassis with the cab, and that height from the ground line is 27⅜ for that structure. The difference between that is that the load on the first one, whatever exhibit number that is, with the rack structure on it, is shown on these photographs, Exhibits 29 and 30, having the rack structure on it, involving a certain amount of extra weight, which would not be on the tractor chassis as sold by the Dodge manufacturer. In other words, there is a different weight involved.

Q. Then your Exhibit 9 refers to the Dodge without the superstructure?

A. That is correct, just the standard chassis with a cab, for the purpose of determining the center of gravity for just a standard chassis, which is 27⅜ inches high for that body. Now add to that the stake rack body sold by Dodge, 13-foot stake rack body, shown on print 3165, which weighs 1205 pounds according to the truck manufacturer, we determine the center of gravity for the stake rack body structure itself, as shown on that print, and is located a half inch above the floor line or 41¾ inches above the ground line. That is the center of gravity for the stake rack body structure that weighs 1205 pounds. Now taking the difference between the weight of the tractor with the stake rack body and the gross weight of 15,376 pounds, we get

a so-called pay load put in the body of 9271 pounds, which load we have taken as only being four feet high in the body. That kind of a load you can assume as anything, that is four feet high, thirteen feet long and the width of the stake rack body and the center of gravity of such a load would be 65 inches from the ground line to that pay load.

Q. Mr. Judd, is a four-foot high load an unusual load of any sort?

A. No it isn't, they usually run as an average for freight hauling higher than that, I simply took four feet as being at least a very fair height, giving the benefit of the doubt for a low height load a preference to a high load.

Q. Does the comparative vertical center of gravity between that truck and the carrier with the car over the cab and one car on the carrier at the back, 65 inches for the first truck and 50½ for the car carrier—

A. I don't think I get your question. You say one car over the cab?

Q. And one car on the truck, which I think is the basis of your figures.

A. I would say that 65-inch figure.

Q. 65 was the lowest figure you gave as the truck load?

A. That was the center of gravity for the pay load itself. There are three distinct bodies on this print, the tractor chassis itself, it has one center of gravity, the stake rack body, which is another, and the pay load itself, which is another, three distinct bodies, which are transmitted by taking moments of vertical and horizontal axes to get one common point, transmitting these three centers to one common point brings the center of gravity of the com-

bination down to 50⅞ inches from the ground level and 27⅞ inches in from the rear axle.

Q. Is 50⅛ inches in a general center of gravity or figure which would be comparable with the 50½ vertical center of gravity that you gave for the car carrier?

A. That is correct, having the same gross weight for both.

Q. Will you tell us in general whether the center of gravity would be farther front on the car carrier than it would be on a truck loaded with a four-foot car?

A. Yes it is.

Q. Is that very much farther front, can you tell us?

A. It is the difference between 47¼ inches and 29⅞, which is approximately, roughly 18 inches.

Q. Do you know from your experience whether the shifting of the horizontal center of gravity a foot to 18 inches or a foot and 2 inches is enough to outweigh or counterbalance the safety that goes into all of these trucks?

MR. KEITEL: Does he build these trucks, can he give an opinion about the fact of the safety built into a truck?

Q. Mr. Judd, answer this question: all of these trucks are designed having in mind a particular location for a horizontal center of gravity, aren't they?

A. Yes, that is correct.

Q. Now do you know—if you don't of course we don't want you to guess at it—do you know whether the trucks must be loaded in order to be operated safely, all of them, with the horizontal center of gravity at the same point or is there an allowance, a leeway both front and back?

A. Oh there is an allowance, you don't have to

have a set center of gravity to come within the truck manufacturer's truck rigging or carrying capacity, either as to the carrying capacity on the front or rear axle. The gross weight carrying capacity, if that is what you mean.

Q. Yes, that is what I mean.

A. That is correct.

Q. Do you know whether it is practically possible to load any kind of a truck and always maintain the horizontal center of gravity at the same spot?

A. No it is hardly ever exactly at the same spot.

Q. Have you prepared any further exhibits?

A. One of the principal reasons for making a comparison in this manner in determining the center of gravity in both the two-car carrying trucks, shown on Exhibit 5, as against the truck, commercial trucks, used on the highway for hauling freight, as shown on Exhibit 9, actually shows a center of gravity of both of them to be practically exactly the same height from the ground level in each case. If that is true the tendency to tip either one of those vehicles over on the highway going around the curves at any pre-determined speed, would be the same. The tipping angle shown in the two-car truck carrying outfit, shown on Exhibit 5, has a critical angle for tipping in the center of gravity as given of 32 degrees, and that would be the same for the commercial truck shown on Exhibit 9. So that there is no reason why the truck carrying two automobiles will tip over any easier than a commercial truck that is used on the highway carrying the same gross weight having the same center of gravity height shown on Exhibit 9, and of which there are probably thousands of them running around the country.

Q. Have you in any way checked the results, whatever the results are, do they follow in practical experience?

A. The figures given on these sketches and these figures worked up to where the centers of gravity are actual scale weights.

Q. They are not estimates?

A. They are not estimates, it is not an estimating proposition.

Q. Does your company maintain a testing or proving grounds anywhere or do they test this equipment?

A. We do a certain amount of testing on equipment of this kind.

Q. Have you any place where you can determine the action of the brakes and matters of that sort?

A. Yes, we usually do it either in the plant or out on a highway.

Q. Has anything in your actual experience on the highway been contrary to the results you have testified to, in those proofs?

A. No.

Q. What do you say as to the safety of the equipment of the type discussed, with one car over the cab and one car on the truck or the rear of the truck?

A. It is just as safe as the commercial truck vehicle that is used to haul loads on the stake rack body as shown in Figure 9.

THE COURT: Suppose there is one car above the cabin and no other cars on there, what then?

A. I consider that in operation on the highway was being unsafe. That is a different set of conditions which the job was actually designed to be used for.

THE COURT: That happens at times, does it not?

A. Not to my knowledge.

THE COURT: One automobile on the load is to be delivered at Harrisburg and another in Carlisle, then what would be done with the one on top of the cabin?

A. Yes, if the driver didn't take it off and put it down below that is correct and I would assume from my experience and knowledge of such operations that the driver would do that, knowing that it is safer, for the same reason that in other types of transportation equipment, even on freight hauling equipment, there are like conditions of operation which are unsafe on certain loads carried if the driver does not use some judgment. For instance, in a trailer if they put the load on the rear axle on a semi-trailer and went down a steep grade that would tend to set the truck's angle that changed the load on the rear axle of the truck, it would probably jack knife if the operator didn't have sense and experience to shift the load instead of the center and put it in the middle of the trailer. There are certain operating conditions from experience that most of these men use their—just common sense.

Q. You don't recommend the use of any equipment with just one car over the cab and no other car on?

A. Absolutely not.

Q. Do you know in your experience of anyone ever operating equipment in that way?

A. Not to my knowledge.

Q. Does your company provide the chains with which cars are chained down?

A. Yes, sir.

Q. Have you determined the size of those, the

strength of those chains with reference to the requirements to be met?

A. Yes, we have.

Q. In your judgment are the ones you supply adequate for the purpose of keeping the car on top of the ramp?

A. Yes, we have no difficulty. Of course there is a combination I know which adds to the support of the cars from coming off, that is outside of the chain, that is the stops at the front wheels of the car.

Q. Does that aid materially as to the forward motion, that the car is stopped?

A. Very materially, it acts like a stop check.

Q. There is testimony that the chains ought to have exactly the same tension; are the chains fastened to the body above the springs of the car?

A. Mostly.

Q. Where they are fastened to the axle below, are the tires of the car inflated?

A. Yes.

Q. Is there a tendency to equalize the tension by that, because of the tires, and particularly of course where the chains are fastened to the body above the car seat?

A. There is that tendency.

Q. In your experience, or do you know of operators having difficulty because of unequal tension on chains holding down equipment?

A. We have no difficulty along that line.

Q. Do you know of any factors of safety involved in the carrying of a small part of the car, like a bumper, over the cab, that is not involved in every day trucking, is there any factor of safety different in carrying a car over the cab than in carrying an equal weight of any other sort over the cab?

A. No, there is no difference.

Q. Will you tell us if the tendency to maintain operation or the tendency to yield to centrifugal force on a curve would be the same as to a car that carries an equal height, whether it were located over the cab, partly over the cab or directly back of the cab?

A. Going around curves?

Q. Or the forward motion and in a straight line.

A. As far as tipping over sideways is concerned it wouldn't make any difference unless you moved that body either too far behind the rear axle on the tractor or too far forward. It means taking the load off or putting the load on in front of the rear axle and that is usually done within the limits of the carrying capacity of the vehicle's axles that it is used for.

Q. The tendency to move forward in a straight line, would it be just the same on a car that carries back of the cab and up high as it would on one where the part was over the cab the same height? I mean does being over the cab actually affect the safety of the operation so far as the forward movement?

A. Well you would have to take that in combination, it seems to me, with other things. It isn't just the fact that you have the car over the cab that makes it safe or unsafe, the question is you have to take a given set of conditions with the car up there combined with the other one behind it with the tractor, because the center of gravity will in fact shift, it is safe, if it does not it is unsafe.

THE COURT: It is never safe to run such a tractor 40 miles an hour, such a tractor with

two cars, it is not safe to run it 40 miles an hour?

A. Yes, I would say it is.

THE COURT: That is about 50 feet a second?

A. That is right.

THE COURT: There are curves in the road and you have to run around curves and all that?

A. Yes, I would say it is safe, it is just as safe as a commercial truck which is used to haul loads on a stake rack body.

THE COURT: Is not the equipment pretty long?

A. That is true.

THE COURT: As I have discovered it when I tried to drive around it.

A. That is right.

Q. I think I can make my own question clearer if you would look at Exhibit 15, tell me whether or not in your judgment if the bumper and the trunk could be taken off the rear of that front car, so that no part of it was over the cab, if that would increase the safety of operation to any extent that you could figure?

A. No, not whatsoever.

THE COURT: However, the weight is not on the cabin.

MR. McNEES: It comes in the law, however, if the Court please.

THE COURT: Does it?

MR. McNEES: Oh yes, that is where we are having our trouble, it says over the cab, not on the cab.

Q. I want to ask you further now, under this

Exhibit 15, if the front car were moved back entirely a foot or 15 inches, if that would clear any part of the car being over the cab, would that materially affect the safety of operation with that equipment?

A. No.

Q. Have you any other statement, Mr. Judd, in mind on the question of safety operation?

A. Yes, I have prepared a drawing and data making an analysis of the particular truck frame of this particular truck, showing the combined moments that takes place in the truck frame and giving the relative strength of the frame in regard to the load that it has to support and operate under.

Q. And have you described that on the blueprint?

A. That is described on blueprint SK 3168, Plaintiff's Exhibit No. 34.

Q. And have you any figures supporting that Exhibit?

A. Yes, they are carried in three different sheets, four different sheets, which can be marked Exhibits 1, 2, 3, 4.

Q. Will you proceed with the statement?

A. Taking the same tractor used to haul the two cars upon i[illegible] loaded 3200 pound cars, given loads covering engine, cab, supporting weights as they are placed upon the frame of the tractor and located according to the truck manufacturer, dimensions given us, and taking the car weight distribution as shown on the original drawing SK 3163, we imposed upon this frame certain loads which bent the frame of the tractor and in order to analyze whether the frame was safe enough or not those loads had been worked up in the form of

moments, taking about a given axis and as shown on sheet 1 Exhibit 11.

MR. KEITEL: May I ask what bearing this testimony that you are giving now has as far as the car on the cab is concerned?

MR. McNEES: If the Court please, there was testimony that the point of support for these ramps was such that the frames would not stand the weight. Do you remember you have testimony to that effect, that the frame was not designed to carry, and there was testimony as to how welding particularly affected the frame.

MR. KEITEL: I do not recall that.

MR. McNEES: We don't think ourselves it is very important, but unless the other testimony can be in some way counteracted. This testimony is to show that the frame is not so weakened by putting on this superstructure that it would result in an unsafe factor.

THE COURT: You may show that if you can.

A. From the moments taken the loads imposed on this frame it shows that the frame is the weakest at the cross section shown on line AA on Exhibit 34, and on sheet 2 of the data submitted along with it there is a sketch showing the cross section of the frame at that point, the frame is 6 7-8 high, balancing the 2 9-16 from the outside. At that point is the point of support, the front support of the structure over the cab, in which we drill 2 9-16 holes in the web, on the table of dimensions shown in the sketch on sheet 2, and taking that section and determining the moment of inertia in the section minus that section on the functions of strength

that denote the function of the strength of a given section we find that with the holes out, or after drilling the holes, it makes the section slightly weaker, with the section minus 11.7, and the combined moment that point of 79,785 pounds, which gives us a frame stress of 6790 pounds to the square inch stress in the frame. Now the frame material that is used in truck structures of this sort are capable of standing an ultimate before they bend or rupture of approximately 35,000 pounds to the square inch.

Q. Are you telling us then that it is just as strong if you drill a few holes in it, as if it is solid, is that the idea?

A. No, sir, that is not correct. As a matter of fact if these holes were drilled in the flanges of the frame it would very materially reduce the strength, and as I think Doctor King testified, that the frame manufacturers put a note on their tractors denoting not to drill the flanges of the truck frame; which is correct; however, if you put a small hole, not very large, right under the neutral axis of the center, in the middle, it would reduce the strength of the section practically nil, very small. The holes in this case for the section, modulus, without the holes is 6.32, compared to 5.88 with the holes, which is quite a difference, a difference of about 18, 20 per cent., and the result after drilling the holes gives a stress in the frame, as I stated, 6790 pounds to the square inch and the frame can withstand an ultimate of approximately 35,000 pounds, which is a safety factor of about four and one-half.

Q. Do you consider that an adequate safety factor?

A. Very adequate.

Q. Is it correct that in figuring stress and strains there are many structural buildings with a factor of 100 per cent.?

A. Building structures are about 18,000 pounds to the square inch, of course they have different safety factors than they do—

THE COURT: Do you think it will enlighten the Court in any way or are you doing this to build up a nice record?

MR. McNEES: No, we hope we are putting in more testimony that the Court will want to consider in connection with the testimony of Doctor King.

If the Court please, we have finished with our description of this matter and we have only one further reference, which is in connection with the trailer behind the tractor, that we think probably ought to be in.

A. There is only one other thing that we attempted to account for and that is that the weak part of the frame when brake application is made on the highway, and this unit, it tends to put an additional force on the frame structure in using the Interstate Commerce Commission brake requirements, the truck stoppage requirements, 14 feet per second, puts an additional 17,000 pound bending moment and brings the stress up to 8230 per square inch, which still leaves a safety factor of about four to one before the frame would fall.

Q. That is shown on sheet 4?

A. That is shown on sheet 4.

Q. Have you any further blueprint prepared?

A. The only other blueprint shown on sketch 3182, which carries a picture of a semi-trailer as used behind the two-car truck, giving the center of

gravity of the combined trailer with the two cars, 3200 pound cars, as being 49 7-16 inches above the ground.

Q. That is just a little bit under the vertical center of gravity of the front unit of the two cars?

A. Just a trifle, and the upper righthand corner gives the angle of that 32 1-2 degrees.

Q. That is shown on blueprint marked SK 3182?

A. Yes.

Q. This last exhibit to which we have just referred contains figures and centers of gravity, and is self-explanatory?

A. That is correct.

MR. McNEES: I think we will offer all these exhibits to which Mr. Judd has referred, being Plaintiff's Exhibits 28 to 35, inclusive.

THE COURT: We will not admit them until after cross examination.

Cross Examination

BY MR. KEITEL:

Q. Mr. Judd, what model of Dodge truck are you using there as a tractor?

A. It is noted in the data that goes along with the drawing as Dodge 1938 Model RH 47, 159 inch wheel base.

Q. RH 47, how is that classified, as what weight truck?

A. Classified as a two-ton truck.

Q. What does that mean, two-ton?

A. That is the normal rating given by the truck manufacturer.

Q. Does that have to do with the cargo that would haul, to be two tons?

A. That has to do with the carrying capacity of the truck.

Q. Now do you know what the recommended gross weights are for the front axle of that truck?

A. I do.

Q. Will your give that to us please?

A. There are 3600 pounds on the front axle, 12,000 pounds on the rear axle, according to the truck manufacturer's rating.

Q. 3600 pounds, on the front axle, if you considered the weight on each tire, how much would that be, what would be the allowance for each tire?

A. Allowance for each tire?

Q. Yes, on the front axle.

A. 1800 pounds, you have two tires.

THE COURT: Solid tires or inflated?

A. Pneumatic tires.

BY MR. KEITEL:

Q. I refer you to this first blueprint, Plaintiff's Exhibit 32, and ask you what that print shows as to the weight on the front tire?

A. It shows 4560 pounds.

Q. It exceeds the recommended weight by nearly a thousand pounds, is that correct?

A. That is correct.

Q. Now, if on this same exhibit that we just talked about this car over the cab were farther forward, would that place the center of gravity any farther to the front?

A. Depending upon how far you would move it.

Q. If you moved it at all it would change it from a small amount to something substantial, depending upon how you moved it?

A. That is right, but you can't move it any far.

ther than shown, because the structure is so made, hypothetically that is correct.

Q. If the car in No. 2 position does not contribute any weight to the tractor would that move the center of gravity forward?

A. Yes, it would. You mean the combined center of gravity of the car on top?

Q. Yes.

A. That is correct.

Q. Do you manufacture any equipment in which one or two cars place their entire weight on the tractor?

A. Equipment where one or two cars—

Q. In either case, yes.

A. Manufacture any equipment that places just one car on the tractor?

Q. Without any weight, except the fifth wheel.

A. We make no equipment of that kind.

Q. Do you make any equipment that has two cars completely on the tractor?

A. Only that shown on Exhibit 5.

Q. One similar to this blueprint, is that correct?

A. That is correct, we have made other pieces of equipment with longer wheel base that will haul cars; I recollect I think we made ones to haul three cars on the tractor, that is a longer unit than this, just taking it as a tractor unit to haul cars.

Q. I believe this print and the second one here under consideration, Exhibit 7, I believe, shows that as to the truck load on, what you call a normal load, the center of gravity is near the rear axle, is that correct?

A. Not the way you state it, it is not correct.

Q. You tell.

A. They both have the same load, both have the same gross weight, these two exhibits.

Q. Which one has the center of gravity near the rear axle?

A. The commercial vehicle stake rack body.

Q. Isn't that preferable?

A. Within certain limitations, with limitations.

Q. What qualifications would you place on that?

A. It isn't preferable—I wouldn't say that it is any more preferable than the one shown on Exhibit 32. It is true that there is a difference, the front axle weights only having 2890 pounds, and the other having [illegible] pounds. However, the tires used on both vehicles, or at least on the one hauling automobiles, are 32 by 6, 10-ply tires, furnished by the truck manufacturer, which has a tire manufacturer's carrying capacity rating of 2200 pounds per tire, or 4400 pounds per axle, so that the tires on the one having the greatest front axle load are only overloaded a very small amount, about 10 per cent, which from the tire rating standpoint is within reason.

Q. Now, isn't it easier to carry a load when it is nearest the back axle, from the standpoint of transportation? If your were a transportation engineer wouldn't you want the load nearer the back axle?

A. With certain provisions, with limitations.

Q. Isn't it like a wheelbarrow?

A. No, I wouldn't say so.

Q. You will admit that in a wheelbarrow the nearer the wheel it is easier to push?

A. If you have enough power that is not true, it depends upon the conditions under which you are operating each one.

Q. I don't see how having the power would make any difference as to the ease with which it is propelled.

A. The power has all to do with the ease with which anything is pushed.

Q. If you can get it started, if you can overcome the inertia?

A. Whether you overcome the inertia or not that is true.

Q. You don't admit then that it is better to have it nearer the back axle than the front axle?

A. Not without limitations, because you have to take certain conditions.

THE COURT: I wish I knew how it is going to aid me in determining whether it is safe to put an extra automobile on top of the cabin, which is the only issue we have.

MR. KEITEL: Your Honor, this witness has very ably shown the center of gravity on these two types on this blueprint are about the same height and we are showing that it makes a difference where it is.

THE COURT: I am not sure that it makes any difference at all so far as the issue we are trying, where the center of gravity is. I think we have spent a great deal of time here in the taking of testimony that does not seem to me to be any assistance to the Court whatever in reaching a conclusion as to whether it is safe to put an automobile on top of the cabin. We are getting away back now to the rear of the chassis, and that is too far away.

MR. KEITEL: That is where they have it on this truck. I am willing to abandon that.

THE COURT: I have just about reached

the point where we are going to shorten this inquiry. Do we not have everything that will be of any use to the Court in reaching a conclusion as to the safety of an automobile on top of the cabin?

MR. KEITEL: I would prefer to have further cross examination of this witness on the testimony which they spent an hour in developing.

THE COURT: I know they have spent twice as much time as they should have, I will agree to that, now you want to spend the same amount of time.

MR. KEITEL: No, not even half the same amount.

THE COURT: We are not concerned with the utility of this method of transportation, we are only concerned with the safety, and a good deal of this evidence on both sides that has been introduced as to how useful it is to haul two cars instead of one, we are not interested in a bit. All that I intend to consider when I examine this very voluminous record, as it must be now, is whether it is safe to have an automobile on top of the cabin. I do not care anything about anything else that you produce here that is not relevant and pertinent.

MR. KEITEL: We will abandon that line of cross examination. I have some other matters though.

MR. McNEES: You will consider also whether it is safe to carry any part over the cab?

THE COURT: Certainly, it all means the same thing, but you folks have gotten clear back onto the chassis. That is going too far back for this inquiry.

BY MR. KEITEL:

Q. Mr. Judd, are you of the opinion that a ramp over the cab is dangerous?

A. I don't think it is if it is operated the way it was intended and with the one car back of it.

Q. Were you ever of that opinion?

A. No.

Q. Is that the opinion of your concern, do you speak for them?

A. That it is safe to operate it?

Q. That it is dangerous to have the ramp over the cab.

A. I don't think it is dangerous if you have the other car back of it.

Q. Do you suppose that is the opinion of your organization, or is that just—

A. We do not sell them.

THE COURT: In other words, that means the two cars on that equipment?

A. That is correct.

THE COURT: Without it it is not safe?

A. That is correct.

THE COURT: That is the whole case.

BY MR. KEITEL:

Q. Do you consider the ramp dangerous or have you ever considered it dangerous?

A. In what respect?

Q. In any respect.

A. I can't tell just what you mean—dangerous in the manner in which it is used, figured to be used?

Q. Yes.

A. No, or we would not design it the way we did if we had thought it was dangerous.

Q. Is that the position that your firm takes as to these trailers that you build?

A. They sold them for that purpose, and it is the policy of our concern not to build anything knowingly that is detrimental or dangerous to the best interests of anybody using them.

Q. I show you a paper marked Defendant's Exhibit "C", which is a copy of a circular issued by Whitehead & Kales, and ask you if you ever saw that circular?

A. That is correct.

Q. In the upper left hand corner of that circular does it contain this language: "Eliminates danger of ramp over truck cab"?

A. That is correct; it does state that.

MR. KEITEL: I offer Defendant's Exhibit "C" into evidence. That was identified at the first hearing but not introduced.

A. I would also like to state the reason why that was put in there, if I may.

MR. McNEES: Go ahead.

A. The reason that was put in there is because that statement was made in regard to a comparison to another piece of equipment similar to this, which is a semi-trailer, which semi-trailer had a ramp extending over the top of the cab, which ramp was movable in respect to the turning of the tractor, which was not felt as good a construction as this and consequently isn't the same construction as referred to in this case, of the car being over the cab of the truck, which car is stationary with the tractor, it doesn't move relative to the tractor when it turns, that is the reason for that statement.

Q. That is a circular of your company?
A. That is correct.

MR. KEITEL: I offer this Defendant's Exhibit "C" in evidence.

THE COURT: Any objection?

MR. McNEES: No.

THE COURT: It is admitted.

Q. I show you Plaintiff's Exhibit 15 and ask you whether the location of the car, the front car on the upper deck, would have any bearing on the momentum of the vehicle, its position, either farther front or where it is?

A. Would have any bearing on the momentum of the vehicle?

Q. Yes, the difficulty of deflecting it from a straight line.

A. You mean if you were going one under 20 miles an hour and the other under 60 miles an hour and attempted to stop, whether the acceleration would be different in one case than another?

Q. No, let us get at it this way: does the car over the cab increase the momentum, the force which has to be overcome in turning the vehicle because of the weight in the front?

A. Yes, that is all determined by the center of gravity.

Q. The farther back you move the car over the cab the less influence that will have, is that correct?

A. Again you have got to state that with provisions.

Q. Is it generally correct?

A. No, it isn't generally correct.

Q. What is wrong with it?

A. The wrong with it is you have to have a given

set of conditions in order to make a definite answer to that statement.

Q. Isn't it true the projectile with the weight at the front wheel will carry forward better than a projectile with the weight in the middle, just a matter of physics? I am referring to an arrow, I believe Doctor King used that analogy, an arrow has the weight at the front, you never saw an arrow with the weight in the middle, and our contention is that the farther front these cars on top are, the more momentum the vehicle will have and the more force there will be to overcome in making a turn?

THE COURT: And therefore more dangerous?

MR. KEITEL: That is correct, I am asking this witness whether moving this car nearer to the front will affect that force.

A. Moving the car either forward or backward has nothing to do with the lever arm on the vehicle. You are talking about whether or not moving it forward or backward has something to do with the tipping over, either forwards or backwards, tipping directly over endwise, whatever it is.

Q. Does it have anything to do with the forward motion of the entire truck and trailer?

A. Anything to do with the car?

Q. With the forward motion.

A. The forward motion?

Q. As distinct from side motion.

A. It functions differently, yes, it is a different function. You have two functions, you have one tendency to tip over sideways and another one to tip end over end. The thing you are referring to is whether you move the car over the cab either

forwards or backwards the function of that is simply that if you move it far enough forward with the weight to change the location of the horizontal center of gravity in relation to the hubs of the truck hauling it, it might tip over endwise, if back far enough it might tip over backwards.

Q. Moving this car on Plaintiff's Exhibit 15 back would move the center of gravity of the entire equipment?

A. Not enough so that you would ever notice it.

Q. You would change the center of gravity, is that correct?

A. Very, very small amount.

Redirect Examination

BY MR. McNEES:

Q. May I ask you with reference to Defendant's Exhibit "C", the one which contains the statement concerning the elimination of the ramp over the truck, and your statement that that was in comparison with the carrying of the ramp from the trailer, over the cab, that Model "C" on Exhibit 30 indicates the type to which you refer?

A. That is correct, that is the Model "C" referred to in that statement, because the tractor moves, and when you turn the tractor around the car still stays on the trailer and tractor.

MR. McNEES: That is all we have.

If the Court please, we have here a number of drivers whose testimony would merely be cumulative as to that of the driver called this morning, Mr. Costa. They haven't the record that he had apparently, but it would be cumulative, we think we will not call them

now. We would like to call one further witness to testify in rebuttal of part of the testimony of Mr. Ulmann, then we will be ready to close.

THE COURT: You have 24 minutes.

L. M. FRANCIS, Recalled.

Direct Examination

BY MR. McNEES:

Q. Mr. Francis, you have already testified in this case?

A. Yes, sir.

Q. Explained who you are and what your business is?

A. That is right.

Q. I want to ask you now if you heard the testimony both yesterday and this morning of Doctor Ulmann?

A. Yes, I did.

Q. I hand you a copy of Exhibits prepared by him and ask you if from your recollection of the testimony and from these Exhibits you desire to make any statement in which you do not fully agree with Doctor Ulmann?

A. Pages 1 and 2 of this report deal with the methods used in calculations and I think this material is correct.

Q. Of Exhibit "PP"?

A. Yes. Page 3, which contains Figure 4, shows a car loaded on the rear on the chassis of the tractor in the normal manner of loading. This is not a normal manner of loading, as far as I know this method of loading would probably never be used except in very odd cases where they wanted to

carry one car on a new truck chassis or something of that kind, so that doesn't mean anything. Figure 5, it says Figure 5 on the same sheet, shows a car loaded over the cab in the manner used in the case in question. This figure shows a car loaded over a cab but it does not show the trailer, which is regularly connected to this truck, and therefore the deductions made from this figure are of no use, because they don't apply. The weight of the trailer on the back of this tractor would greatly change the position of the center of gravity. Now on page 4 of the same exhibit it again refers to Figure 5 and Figure 4 and these figures I consider do not apply for the same reasons previously given. On page 5 he has assumed a curve radius of 100 feet in which to lay out his figures on the point on which these outfits would tip over. I don't know how many curves there are of 100-foot radius in Pennsylvania, but I think they are very scarce outside of sharp corners where the man would necessarily have to slow down and I think unless it is also shown that it is very common in Pennsylvania to drive around 100-foot radius curves that that particular statement does not really have any bearing.

MR. KEITEL: That is an argument, your Honor; it is not testimony.

THE COURT: Oh, I know it is.

A. Now on this sheet here which I referred to as page 4, note 1, I have taken the truck shown in this testimony and added a trailer to it, which would ordinarily go with it, and figured the center of gravity and it lowers the center of gravity one foot, also moves it nearer to the rear axle.

Q. Now, Mr. Francis, the sketch which you have drawn with the trailer attached is based upon the

weights and figures and location of cars as shown by Doctor Ulmann?

A. As far as the truck is concerned.

Q. The one to which you have added the trailer?

A. I have added the trailer.

Q. You say that lowers the truck center of gravity one foot?

A. Approximately one foot. These figures I assumed, I haven't the weight of the trailer with me exactly, but it is very close. In addition to that there was something said about this fifth wheel behind the rear axle. Now on these particular jobs they have been designed this way, that does do a great deal, of course, towards balancing the car on the truck and it also makes it much easier to negotiate curves, and this type of vehicle, on account of the long wheel base of the trailer, so that it is not detrimental at all to the operation of these vehicles.

Q. In the example you have used you placed the fifth wheel four feet back of the axle?

A. Yes, sir.

Q. Does that lighten the load on the front axle?

A. Yes, it lightens it in a ratio of 48 inches to probably 157, which is normal wheel base for those trucks, considering the load that the trailer applies to the rear end of the trailer.

MR. KEITEL: We object to this testimony. This witness has not testified that he has used the same equipment that we used in our sketch at all. Professor Ulmann used one of the exhibits, Paul Snyder's truck, and this witness puts a Francis trailer, some peculiar construction on there, with the fifth wheel back of the axle. I don't see how that can be used to im-

peach this other testimony, which picked out a definite vehicle. The vehicle he selected for this report is not used as an independent vehicle, and therefore any deductions he makes are of no use.

Q. Mr. Francis, does your company build any equipment designed to carry a car over the cab and no car anywhere else?

A. I don't think we ever made anything of that kind.

Q. To carry one car over the cab and no car anywhere else, on any equipment you built?

A. No, I don't.

Q. Do you agree that that probably would be an unsafe operation?

A. It very likely would.

Q. Did you ever see one operate that way?

A. I don't remember ever seeing it, I am positive I never did.

Q. Have you any other statement that you want to make?

A. No, I think that is all.

Cross Examination

BY MR. KEITEL:

Q. Have you ever seen any of Paul Snyder's equipment?

A. I couldn't say.

Q. Would it make any difference in your calculations if the second car was resting partly on the tractor?

A. What do you call the second car?

Q. No. 2 car.

A. I don't know any practical way it could rest partly on the tractor.

Q. Your own exhibits show that.

A. You mean partly on the tractor and partly on the trailer?

Q. That is correct.

A. What would you do when you turned a corner, where would the car go?

Q. I beg your pardon. I mean two cars completely on the tractor, such as you have in Model R4, R4T, RRT and one or two others.

A. Well now, what do you want to know?

Q. Would that make any difference in your calculation of the center of gravity?

A. It would be very close. Mr. Judd has just pointed out very carefully where the center of gravity on that outfit must be.

Q. Would it make any difference, so far as the weight exerted on the front tires by the trailer, back of the fifth wheel?

A. I think you will have a little more weight where you have two cars on the truck.

Q. Is it your testimony, your considered opinion, that the car over the cab has absolutely no influence on the front axle or front tires, the center of gravity or the momentum, separate and aside from the force exerted by the trailer?

A. No, it isn't my opinion. You would have a certain weight up in the air there that is going to have a certain result in the operation of your car.

Q. Why wouldn't the testimony be of some use then?

A. Because his testimony is based on the outfit which I have been using, this weight of the trailer

on the back end of this truck, that is the effect of one car over the cab.

Q. If you are computing the weights on the front axle how would you consider the force exerted by the car over the cab, wouldn't you consider that at all?

A. Certainly I would.

Q. Then it has some relevancy, doesn't it?

A. To some extent, but you are taking away from that by the weight on the front axle of this trailer applied behind the read axle.

Q. Did Professor Ulmann say that that had no bearing on this situation?

A. I say what he did has no bearing because he hasn't a trailer attached to the truck and the outfit he uses is not used, so why should it be considered?

Q. In other words, the cab weighs more when the trailer isn't on than it does when it is on?

A. You don't understand this thing at all.

Q. Yes, I understand it better than you do.

A. The car over the cab weighs the same whether the trailer is on or not, but the result on the truck is different.

Q. Did Professor Ulmann say the trailer doesn't have any influence on the truck?

A. He doesn't say anything about it on that particular outfit.

MR. McNEES: If the Court please, we plead in the original bill that the allegations contained therein cover the question of discrimination, that is, the question of equal protection of the laws, and so that we may be clear and not with the purpose of introducing any other testimony, merely the testimony that

is now in may be applied in the light of amendment, we ask leave to amend the bill by adding to the statement therein the following: "That the said statute denies to the plaintiff the equal protection of the laws, said statute is special and class legislation of the type prohibited by the Constitution of the Commonwealth of Pennsylvania, since it is not applicable to all vehicles which transport or are designed to transport a part of the cargo over the cab, and therefore discriminates against the plaintiff."

MR. KEITEL: Under those circumstances we have no objection to its inclusion, although of course we deny the allegation as averred.

THE COURT: There is no use calling any other witnesses for the short time that we will be here. Have you any further testimony?

MR. McNEES: No, we have concluded.

THE COURT: Have you any further testimony?

MR. KEITEL: No.

THE COURT: Then the testimony is closed, and the reporter may transcribe the testimony and after that is done you can put it on the argument list when you are prepared to argue it.

I hereby certify that the proceedings and evidence are contained fully and accurately in the notes taken by me on the hearing of the above cause and that this copy is a correct transcript of the same.

John Ruth,
Official Stenographer.

The foregoing record of the proceedings upon the hearing of the above cause is hereby approved and directed to be filed.

FRANK B. WICKERSHAM,
Additional Law Judge.

January 27, 1938.

(NOTE: Exhibits are printed separately in Volume II.)

IV.

OPINION

By the Chancellor:

This case comes before us on bill of complaint praying that Section 1033 (c) of the Act of 29th June 1937 P. L. 2329-2401, which provides that:

> "(c) No person shall operate a vehicle on the highways of this Commonwealth carrying any other vehicle, any part of which is above the cab of the carrier vehicle or over the head of the operator of such carrier vehicle.
>
> . . . . . .
>
> "Penalty—Any person violating any of the provisions of this section shall, upon summary conviction before a magistrate, be sentenced to pay a fine of twenty-five ($25) dollars and costs of prosecution, and, in default of the payment

> thereof, shall undergo imprisonment for not more than five (5) days.",

be declared unconstitutional, illegal and void for the reason therein stated.

Many other parties or corporations have intervened as plaintiffs in these proceedings.

The pleadings consist of praecipe for appearance, plaintiffs' bill of complaint, injunction affidavits, decree awarding preliminary injunctions, plaintiffs, bond approved by the court, answer of the defendant, and notes of testimony taken at the hearings.

Requests for findings of fact and conclusions of law have been filed by the parties hereto which we have answered and direct to be filed as a part of the record in this case.

FINDINGS OF FACT

1. Plaintiffs, Alfred A. Maurer and Marcus W. Myers, are members of a partnership, trading as Maurer & Myers Auto Convoy, which name is registered under the provisions of the Fictitious Names Act of Pennsylvania, and their principal office is located in Bloomsburg, Columbia County, Pennsylvania.

2. The defendant, J. Griffith Boardman, is the Secretary of Revenue of the Commonwealth of Pennsylvania, and as such is the head of the Revenue Department of said Commonwealth and is in charge of the administration of said department.

3. The defendant, Admiral P. W. Foote, is the Commissioner of the Pennsylvania Motor Police.

4. The defendant, Charles J. Margiotti, is the Attorney General of the Commonwealth of Pennsylvania and is the head of the Department of Justice and the chief enforcement officer of said Commonwealth.

5. The defendants admit that they threatened to enforce against the plaintiffs the provisions of Section 1033 (c) of the Act of 1937, P. L. 2329-2401, prior to the granting of the preliminary injunction, and that they have instituted prosecutions under said section in a number of cases throughout this Commonwealth.

6. The administration of the Vehicle Code of 1929 P. L. 905, including the amendatory Section 1033 (c) of the Act of 1937 P. L. 2401, is under the Department of Revenue of which the defendant, J. Griffith Boardman is the Secretary and the head; the enforcement of said section is fixed in the Pennsylvania Motor Police of which the defendant, Admiral P. W. Foote is the Commissioner, and in the Department of Justice of which the defendant, Charles J. Margiotti, is the Attorney General and head.

7. In conducting their operations the plaintiffs, in the transportation of automobiles as common carriers have registered certain vehicles in Pennsylvania and have paid to the Department of Revenue the registration fees required therefore for the year 1937, said vehicles being specially designed to transport automobiles, a portion of one of which transported automobiles rests over the cab of the transporting vehicle.

8. The Congress of the United States enacted the

Motor Carrier Act, 1935, approved August 9, 1935 by the President (U. S. Code, Supp. I, Title 49, sections 301 to 327), providing generally for the regulation of transportation of passengers and property in interstate commerce.

9. Congress by statutory enactment and the Interstate Commerce Commission by orders, requirements, rules and regulations, now, regulate transportation of property in interstate commerce with respect to safety of operation and equipment.

10. Plaintiffs, intervenors, and other automobile transporters transport a substantial number of automobiles by motor vehicles into and through this Commonwealth.

11. Plaintiffs, intervenors and other automobile transporters own and/or operate a substantial number of automobile-carrying vehicles on which part of the carried automobiles are above the cab of the carrier or over the head of the operator of such carrier vehicle.

12. The "haulaway" (defendants' term for the business of plaintiffs) business is sometimes engaged in by private carriers not subject to Federal regulation.

13. The Interstate Commerce Commission has taken no steps which usurp the field of regulation over the "haulaway" business to the exclusion of various states.

14. The presence of an automobile over the cab of the truck-tractor of a haulaway combination results in a higher center of gravity than in normal tracking operations.

15. Such high center of gravity in a haulaway makes its operation dangerous, particularly on curves and hills of the types found in Pennsylvania.

16. The automobile over the cab of a haulaway causes excess weight on the front wheels and makes the haulaway more difficult to steer.

17. Such excess weight results in overloading the front axles and the front tires of the haulaway and adversely affects braking, particularly on curves.

18. Such excess weight results in throwing the headlights of the haulaway out of focus, to the detriment of oncoming traffic and the operator of the haulaway.

19. Such excess weight so affects the balance of the haulaway as to make its operation unsafe.

20. The presence of the automobile over the cab obstructs the vision of the operators of overtaking vehicles; and obstructs the vision of the operator of a haulaway.

21. The runway over the hood, placed there for the purpose of supporting an automobile over the cab, obscures the vision of the operator of the haulaway.

22. The vertical framework supporting the runway for the automobile over the cab impairs the vision of the operator of the haulaway.

23. The presence of an automobile over the cab results in haulaways being operated on the wrong side of the road because of overhead obstructions, and also because the vision of the operators is obscured.

24. In the event of collision there is a tendency for the automobile over the cab of the haulaway to become detached and to fly off.

25. The chains used to anchor the automobile over the cab are insufficient to overcome the force stored therein under certain circumstances; and the supporting structure is not strong enough to resist the stress which may be transmitted to it in the event of collision.

26. On May 16, 1934, there was a collision in New York City in which the automobile over the cab of a haulaway became detached and damaged the vehicle with which it collided and injured the operator thereof.

27. On June 23, 1937 there was a haulaway involved in an accident north of Mt. Pocono, which resulted in the automobile partially over the cab becoming detached.

28. On August 17, 1937, near Tobyhanna, a haulaway was involved in an accident, as a result of which the automobile over the cab became partially detached.

29. On February 14, 1936 there was a collision near Erie in which the automobile over the cab became partially detached and damaged the automobile with which the haulaway collided, as a result of which collision the operator of the other car received fatal injuries.

30. On September 22, 1934, near Scranton, an operator of a haulaway lost control, as a result of which the automobile over the cab became completely detached and flew off.

31. On December 18, 1936, in Chester County, in a collision between a haulaway and another automobile the automobile on the upper deck of the haulaway flew off.

32. No attempt has been made to reconstruct the present non-conforming equipment so as to conform with the Act complained of, and non-conforming equipment has been purchased since the Act became effective.

DISCUSSION

Plaintiffs contend that:

(1) The statute we have under consideration is invalid since the right of the Commonwealth to prescribe such restrictions and prohibitions as to interstate commerce was superseded by the passage Congress of the Motor Carrier Act and by the action of the Interstate Commerce Commission in pursuance of the power granted thereunder.

(2) Even in the absence of federal legislation the statute is a direct and unreasonable, arbitrary and invalid burden on interstate commerce.

(3) The statute is not a proper exercise of the police power since the means adopted are arbitrary and unreasonable and have no reasonable and direct relationship to the public safety.

(4) The statute is invalid because it violates the equal protection clause of the Fourteenth Amendment of the Constitution of the United States and is special legislation of a type prohibited by the Pennsylvania Constitution.

As stated in our findings of fact, section 1033 (c) of the said Act of 1937, P. L. 2401, provides:

> "No person shall operate a vehicle on the highways of this commonwealth carrying any other vehicle, any part of which is above the cab of the carrier vehicle or over the head of the operator of such carrier vehicle."

The title of this Act (P. L. 2329) provides, inter alia, as follows:

> "An Act to amend the Act approved the first day of May, one thousand nine hundred twenty-nine (Pamphlet Laws, nine hundred five), entitled 'An Act for the protection of the public safety; regulating the use of highways, and the operation of vehicles, tractors, street cars, trackless trolley omnibuses, * * * upon the highways of this Commonwealth * * *', as amended, by adding new sections further regulating the use of highways and the operation of and the equipment used in connection with vehicles, including trailers, and semi-trailers, street cars, trackless trolley omnibuses * * *."

We think the jurisdiction of the Commonwealth of Pennsylvania over its highways cannot be doubted. The establishment, maintenance and control of highways has always been deemed to be within the police power of the respective states: New Orleans Gas Light Co. v. Louisiana Light and Heat Producing and Mfg. Co., 115 U. S. 650-673, 29 L. Ed. 516; Hodge Drive-It-Yourself Co. v. Cincinnati, 284 U. S. 335.

The long-existing police power of the Commonwealth as exercised by the Legislature in The Vehicle Code is upheld by the Supreme Court in Com-

monwealth v. Funk, 323 Pa. 390, where it is held:

> "The legislature has plenary power over the highways of the state.
>
> "In the exercise of its power to control and regulate the use of the highways, and under the inherent police power of the State the legislature has the power to regulate the manner and circumstances under which, and by whom, automobiles may be operated upon the highways of the state.
>
> "The privilege to operate a motor vehicle upon the highways is not embraced within the term civil rights, nor is a license to do so a contract or a right of property in any legal or constitutional sense."

We think that said section can be sustained, the police power of the Commonwealth authorizing its enactment by the Legislature. We quote from the opinion of Mr. Chief Justice Kephart in Commonwealth v. Stofchek, 322 Pa. 513, 519:

> "But, the State possesses inherently a broad police power which transcends all other powers of government. There is therefore no unqualified right to acquire, possess, and enjoy property if the exercise of the right is inimical to the fundamental precepts underlying the police power. This court said in Commonwealth v. Widovich, 295 Pa. 311: 'The police power is the greatest and most powerful attribute of government; upon it the very existence of the State depends. * * * If the exercise of the police power should be in irreconcilable opposition to a constitutional provision or right, the police

> power would prevail.' It needs no constitutional reservation or declaration to support it: City of Scranton v. Public Service Commission, 268 Pa. 172. * * *"

We think said section 1033 (c) is a safety measure, and is peculiarly within the police power of the state. Such a statute the Legislature not only had the *power* but also the *duty* to enact, to provide for the public safety. In Pennsylvania Railroad Co. v. Ewing, 241 Pa. 581, 595, the court said, in discussing the Full Crew Law of 1911:

> "* * * The legislature was not only empowered to pass it, but was charged with the duty of enacting it, if the safety of those within the contemplation of the act required it. * * * That was a purely legislative question, with which courts can no more interfere than they can with reasonable means adopted by the legislature to secure the needed safety. * * *"

It is contended by plaintiffs that section 1033 (c) is unconstitutional in violation of the Fourteenth Amendment of the United States Constitution. This contention we cannot follow. It can no longer be questioned that once a statute is found to be within the power of the Legislature to promote public safety, the procedure whereby this purpose is achieved is beyond the power of the courts to question, so long as the procedure bears a reasonable relation to the end sought. In Rohrer v. Milk Control Board, 322 Pa. 257, 267, we find:

> "* * * The Fifth Amendment, in the field of federal activity, and the Fourteenth, as respects state action, do not prohibit government regula-

tion for the public welfare. They merely condition the exertion of the admitted power, by securing that the end shall be accomplished by methods consistent with due process. And the guaranty of due process, as has often been held, demands only that the law shall not be unreasonable, arbitrary or capricious, and that the means selected shall have a real and substantial relation to the object sought to be attained. * * *"

See also Nebbia v. New York, 291 U. S. 502, 78 L. Ed. 940.

It has been well settled in Pennsylvania and elsewhere that statutes are presumed to be constitutional. See Kelley v. Baldwin, 319 Pa. 53.

We are of opinion that said section 1033 (c) is a safety measure, and that the plaintiffs have failed under the testimony at the hearings, to meet their burden of proof that such haulaway operations, contemplated in said section, are unsafe and are not a suitable subject of legislative interference.

Users of public highways, though engaged exclusively in interstate commerce, are subject to regulations by the state to insure safety and convenience and conservation of the highways: Pennjersey Rapid Transit Co. v. City of Camden, 142 Atl. 821. Reasonable police regulations by state or municipality, applicable to interstate motorbus traffic, are valid and not direct or undue burdens on interstate commerce: People's Rapid Transit Co. et al. v. Atlantic City, 144 Atl. 630-631; American Coach System v. Philadelphia, 28 Fed. (2d) 736; Atlantic-Pacific Stages v. Stahl, 36 Fed. (2d) 260; Nuttley-Times

Square Service v. Public Utility Commissioners, 102 Atl. 124; Fla. Motor Lines v. Railroad Co., 132 So. 851; State v. Wetzel, 243 N. W. 768; Railroad Commission v. McDonald, 90 S. W. (2d) 581; Butte v. Roberts, 23 Pac. (2d) 342.

In the absence of national legislation, states, notwithstanding the due process clause have reserved police power to prohibit dangerous vehicles from operating on its highways; and statutes limiting the length of single vehicles or combination of tractor and semitrailer or trailer are not void as denying due process: Contract Cartage Co. v. Morris et al., 59 Fed. (2d) 437. In the absence of congressional action the states may regulate interstate commerce in the interests of public safety: Bradley v. Public Utilities Commission, 289 U. S. 92, 77 L. Ed. 1053.

We think the act complained of does not discriminate against interstate commerce and that plaintiffs have failed to prove that said section 1033 (c) does discriminate against interstate commerce in favor of intrastate commerce in any manner whatsoever. See Interstate Buses Corporation v. Holyoke Street R. Co., 273 U. S. 45.

Plaintiffs contend that by the Motor Carrier Act of 1935, Congress and the Interstate Commerce Commission have so taken possession of the field of regulation of interstate motor carriers that the rights of the State to regulate such carriers have been eliminated. We think the facts and the cases decided since the passage of that act fail to support this contention.

We think that all questions arising under the Interstate Commerce Clause of the United States Con-

stitution have been completely and adequately answered by the recent decision of the United States Supreme Court in the case of South Carolina State Highway Dept. et al. v. Barnwell Brothers, Inc. et al., 82 Supreme Court Reports (L. Ed.) 469, 470. In that case as in the instant case, it was contended that the act was an invalid burden on interstate commerce, and that Congress and the Interstate Commerce Commission, under the Motor Carrier Act of 1935, had usurped the field of safety regulation of interstate motor carriers to the exclusion of the states. A careful study of the South Carolina case leads us to the conclusion that State statutes, regulating the use of its highways for safety and protection in general, and section 1033 (c) in particular, are constitutional unless one of the following elements is present: (1) direct and specific legislation or regulation by Congress on the particular type of safety regulation challenged, as here, haulaways carrying cars over the cabs; (2) discrimination against interstate commerce in favor of intrastate commerce; (3) violation of the Due Process Clause by statutes not within the police power of the State. In the absence of these three elements, the validity of section 1933 (c) cannot be questioned.

In the South Carolina case the lower court found that the act there complained of satisfied the due process requirements, but was an invalid burden on interstate commerce. The United States Supreme Court exploded the theory that a valid exercise of the police power can be a burden on interstate commerce as to motor traffic using the State highways. Mr. Justice Stone, in his opinion, makes repeated references to decisions wherein a burden on inter-

state commerce actually existed, and yet the statute was deemed valid. We quote from his opinion:

> "* * * With respect to the extent and nature of the local interests to be protected and the unavoidable effect upon interstate and intrastate commerce alike, regulations of the use of the highways are akin to local regulation of rivers, harbors, piers and docks, quarantine regulations, and game laws, which, Congress not acting, have been sustained even though they materially interfere with interstate commerce.
>
> "* * * This Court has often sustained the exercise of that power (power of a state to make safety regulations for its highways) although it has burdened or impeded interstate commerce. * * *"

After citing a number of cases the court said:

> "In each of these cases regulation involves a burden on interstate commerce. But so long as the state action does not discriminate, the burden is one which the Constitution permits because it is an inseparable incident of the exercise of a legislative authority, which, under the Constitution, has been left to the states."

Finally, in reversing the court below, the Supreme Court said:

> "The regulatory measures taken by South Carolina are within its legislative power. They do not infringe the Fourteenth Amendment, and the resulting burden on interstate commerce is not forbidden."

We think the above quoted decision clearly re-

quires plaintiffs to show either discrimination or usurpation by Congress before section 1033 (c) can be deemed a violation of the Commerce Clause. The Superior Court of Pennsylvania very recently expressed the same view in Commonwealth v. Kennedy, 129 Pa. Superior Ct. 149, 167, where it was held:

> "This delegation of power to the Federal government did not take away from the states, in the absence of Congressional legislation to the contrary, the power to regulate matters of local concern, even though they also concerned interstate commerce. Commonwealth v. One Dodge Motor Truck, 123 Pa. Superior Ct. 311, 330-333, 187 A. 461 (1936), affirmed in 326 Pa. 120, 191 A. 590 (1937), and cases therein cited.
>
> It has frequently been held that the regulation of highways for the safety and convenience of its citizens is a matter of local concern for the State, so far as it does not conflict with any act of Congress and so long as it does not discriminate against interstate commerce."

In plaintiffs' contention that the statute is invalid because it violates the equal protection clause of the Fourteenth Amendment of the Constitution of the United States and is special legislation of a type prohibited by the Pennsylvania Constitution, they rely on what they consider the cardinal principles relating thereto as set forth in Chalmers v. City of Philadelphia, 250 Pa. 251; Wood v. Philadelphia, 46 Pa. Superior Ct. 573; and Germantown Trust Co. v. Powell, 265 Pa. 71, 82.

In Chalmers v. City of Philadelphia it was said at page 254:

> "In the absence of real and genuine distinctions, classification is not permitted. This is the settled doctrine of our cases. Com. v. Casey, 231 Pa. 170; Ashworth v. Pittsburgh Rys. Co., 231 Pa. 539."

In Germantown Trust Co. v. Powell it was said at page 81:

> "* * * 'Classification to be valid, must be based upon a necessity springing from manifest peculiarities clearly distinguishing those members of one class from each of the other classes, and imperatively demanding legislation from each class separately that would be detrimental to the others': Ayars' App., 122 Pa. 266; Com. v. Puder, 261 Pa. 129, page 135. * * *"

Plaintiffs also contend that section 1033 (c) discriminates against the haulaway business in favor of other types of trucking operations wherein part of the cargo is carried over the cab, attempting to prove this contention by a series of photographs introduced into evidence and marked Plaintiffs' Exhibits 22 to 27 inclusive, and they also amended their bill to plead such discrimination.

We think plaintiffs' contention of special and discriminatory legislation can be answered by referring to Patsone v. Pennsylvania, 232 U. S. 138, in which it appeared that a Pennsylvania statute made it unlawful for an unnaturalized foreign-born resident to kill any wild bird or animal except in self-defense, and to that end made unlawful for any such person to

own or be possessed of a shot-gun or rifle. Patsone, an unnaturalized foreign-born resident, was fined under this act. He appealed on the ground that the statute was unconstitutional because it discriminated against aliens as a class. The act was held constitutional. We quote from the opinion:

> "* * * a state may classify with reference to the evil to be prevented, and that if the class discriminated against is or reasonably might be considered to define those from whom the evil mainly is to be feared, it properly may be picked out. A lack of abstract symmetry does not matter. The question is a practical one dependent upon experience. The demand for symmetry ignores the specific difference that experience is supposed to have shown to mark the class. It is not enough to invalidate the law that others may do the same thing and go unpunished, if, as a matter of fact, it is found that the danger is characteristic of the class named. Lindsley v. National Carbonia Gas Co., 220 U. S. 61, 80, 81. The State 'may direct its law against what it deems the evil as it actually exists without covering the whole field of possible abuses.' * * *"

It is apparent that the Legislature directed section 1033 (c) against a particular evil, that is, the carrying of automobiles over the cab of a haulaway. The mere fact that there may also be danger involved in carrying other types of cargoes over the cabs of other types of trucks will not serve to invalidate this section.

We think the title of the Act is not defective. The plaintiffs have raised the question of the adequacy of the title of the Financial Responsibility Law. This

issue is invariably raised whenever the constitutionality of a statute is being questioned, and has resulted in many decisions by the Supreme Court to the effect that the title does not have to be an index to the contents of the bill.

The real purpose of the constitutional provision was explained in Mallinger v. Pittsburgh, 316 Pa. 257, 261, where Mr. Justice Maxey said:

> "* * * The constitutional provision (Article III, section 3) * * * was intended merely to prohibit the practice of passing what were known as 'omnibus bills', containing subjects foreign to each other, and whose title was on that account calculated to mislead and deceive; and a bill may still contain any number of provisions properly connected with and germane to the expressed subject, without violating the constitutional requirement. * * *"

See also Orlosky v. Haskell, 304 Pa. 57.

Section 1033 (c) was added to the Vehicle Code by Act No. 447, the title of which indicates that the Vehicle Code is being amended "by adding new sections further regulating the use of highways and the operation of and the equipment used in connection with vehicles, including trailers and semi-trailers * * * upon the highways of this Commonwealth." Both the original title of the Vehicle Code and the title of Act No. 447 of 1937 amending it, disclose the intent of the Legislature to protect the public safety and to regulate the use of highways. Under the decisions of our own Supreme Court further detailed notice is not necessary. We think the titles of the Vehicle Code and of Act No. 447 of 1937

are adequate notice under the Pennsylvania Constitution of the safety regulations enacted by the Legislature.

Many authorities have been cited by counsel which we have examined with care and from which we have reached the conclusion above stated. The citation of all of the authorities referred to us would extend this opinion to an unnecessary length. A large amount of testimony was taken which we think does not need discussion in view of the conclusion reached.

CONCLUSIONS OF LAW

1. The act here complained of, Section 1033 (c) of the Vehicle Code as amended by Act No. 447, approved June 29, 1937, P. L. 2329, is not unconstitutional as a deprivation of property without due process, but on the contrary is a valid exercise of the police power of this Commonwealth.

2. Section 1033 (c) is not unconstitutional as an unreasonable and invalid burden on interstate commerce, and does not discriminate against interstate commerce.

3. Neither Congress, under the Motor Carrier Act of 1935, nor the Interstate Commerce Commission, has usurped the field of safety regulation of interstate motor carriers to such an extent as to remove the authority of the Pennsylvania Legislature to enact Section 1033 (c) affecting interstate commerce.

4. The said act is not unconstitutional because of

any deficiency in its title under Article III, Section 3 of the Pennsylvania Constitution.

5. Haulaways with an automobile partially or completely over the cab are properly classified as the subject for State legislation designed to promote safety, such as Section 1033 (c).

6. Plaintiffs by their pleadings and evidence, have not made out a sufficient case under the law to warrant the granting of injunctive relief by this court, and therefore the preliminary injunction heretofore granted should be dissolved and plaintiffs' bill dismissed at the cost of the plaintiffs.

FRANK B. WICKERSHAM,
Chancellor.

DECREE NISI

And now, April 27, 1938, this case came before the Chancellor, testimony was taken and argument heard: it is therefore ordered, adjudged and decreed that the decree awarding a preliminary injunction to the plaintiffs is dissolved and the bill of complaint is dismissed at plaintiffs' cost. Unless exceptions be filed within thirty (30) days from the filing of this decree a final decree will be awarded. The prothonotary is directed to give notice to the attorneys for the parties hereto as to the filing of this decree.

FRANK B. WICKERSHAM,
Chancellor.

V.

PLAINTIFFS' EXCEPTIONS TO ADJUDICATION

And now, to wit, this sixth day of May, 1938, the plaintiffs, by their counsel, McNees, Hollinger & Nurick, do file the following exceptions to the findings of fact, conclusions of law, adjudication and decree in the above-entitled case:

1. Plaintiffs except to the learned chancellor's twelfth finding of fact, which reads:

> "12. The 'haulaway' (defendants' term for the business of plaintiffs) business is sometimes engaged in by private carriers not subject to Federal regulation."

Dismissed.

2. Plaintiffs except to the learned chancellor's thirteenth finding of fact, which reads:

> "13. The Interstate Commerce Commission has taken no steps which usurp the field of regulation over the 'haulaway' business to the exclusion of various states."

Dismissed.

3. Plaintiffs except to the learned chancellor's fourteenth finding of fact, which reads:

> "14. The presence of an automobile over the cab of the truck-tractor of a haulaway combin-

ation results in a higher center of gravity than in normal trucking operations."

Dismissed.

4. Plaintiffs except to the learned chancellor's fifteenth finding of fact, which reads:

"15. Such high center of gravity in a haulaway makes its operation dangerous, particularly on curves and hills of the types found in Pennsylvania."

Dismissed.

5. Plaintiffs except to the learned chancellor's sixteenth finding of fact, which reads:

"16. The automobile over the cab of a haulaway causes excess weight on the front wheels and makes the haulaway more difficult to steer."

Dismissed.

6. Plaintiffs except to the learned chancellor's seventeenth finding of fact, which reads:

"17. Such excess weight results in overloading the front axles and the front tires of the haulaway and adversely affects braking, particularly on curves."

Dismissed.

7. Plaintiffs except to the learned chancellor's eighteenth finding of fact, which reads:

"18. Such excess weight results in throwing the headlights of the haulaway out of focus, to the detriment of oncoming traffic and the operator of the haulaway."

Dismissed.

8. Plaintiffs except to the learned chancellor's nineteenth finding of fact, which reads:

> "19. Such excess weight so affects the balance of the haulaway as to make its operation unsafe."

Dismissed.

9. Plaintiffs except to the learned chancellor's twentieth finding of fact, which reads:

> "20. The presence of the automobile over the cab obstructs the vision of the operators of overtaking vehicles; and obstructs the vision of the operator of a haulaway."

Dismissed.

10. Plaintiffs except to the learned chancellor's twenty-first finding of fact, which reads:

> "21. The runway over the hood, placed there for the purpose of supporting an automobile over the cab, obscures the vision of the operator of the haulaway."

Dismissed.

11. Plaintiffs except to the learned chancellor's twenty-second finding of fact, which reads:

> "22. The vertical framework supporting the runway for the automobile over the cab impairs the vision of the operator of the haulaway."

Dismissed.

12. Plaintiffs except to the learned chancellor's twenty-third finding of fact, which reads:

> "23. The presence of an automobile over the cab results in haulaways being operated on the

wrong side of the road because of overhead obstructions, and also because the vision of the operators is obscured."

Dismissed.

13. Plaintiffs except to the learned chancellor's twenty-fourth finding of fact, which reads:

"24. In the event of collision there is a tendency for the automobile over the cab of the haulaway to become detached and to fly off."

Dismissed.

14. Plaintiffs except to the learned chancellor's twenty-fifth finding af fact, which reads:

"25. The chains used to anchor the automobile over the cab are insufficient to overcome the force stored therein under certain circumstances; and the supporting structure is not strong enough to resist the stress which may be transmitted to it in the event of collision."

Dismissed.

15. Plaintiffs except to the learned chancellor's twenty-sixth finding of fact, which reads:

"26. On May 16, 1934, there was a collision in New York City in which the automobile over the cab of a haulaway became detached and damaged the vehicle with which it collided and injured the operator thereof."

Dismissed.

16. Plaintiffs except to the learned chancellor's twenty-seventh finding of fact, which reads:

"27. On June 23, 1937 there was a haulaway

involved in an accident north of Mt. Pocono, which resulted in the automobile partially over the cab becoming detached."

Dismissed.

17. Plaintiffs except to the learned chancellor's twenty-eighth finding of fact, which reads:

"28. On August 17, 1937, near Tobyhanna, a haulaway was involved in an accident, as a result of which the automobile over the cab became partially detached."

Dismissed.

18. Plaintiffs except to the learned chancellor's twenty-ninth finding of fact, which reads:

"29. On February 14, 1936 there was a collision near Erie in which the automobile over the cab became partially detached and damaged the automobile with which the haulaway collided, as a result of which collision the operator of the other car received fatal injuries."

Dismissed.

19. Plaintiffs except to the learned chancellor's thirtieth finding of fact, which reads:

"30. On September 22, 1934, near Scranton, an operator of a haulaway lost control, as a result of which the automobile over the cab became completely detached and flew off."

Dismissed.

20. Plaintiffs except to the learned chancellor's thirty-first finding of fact, which reads:

"31. On December 18, 1936, in Chester

County, in a collision between a haulaway and another automobile the automobile on the upper deck of the haulaway flew off.'"

Dismissed.

21. Plaintiffs except to the learned chancellor's thirty-second finding of fact, which reads:

"32. No attempt has been made to reconstruct the present non-conforming equipment so as to conform with the Act complained of, and non-conforming equipment has been purchased since the Act became effective."

Dismissed.

22. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "12", reading as follows:

"12. Pursuant particularly to Section 204 (a) (1) and (2) of said Federal Motor Carrier Act, 1935, the Interstate Commerce Commission, on December 23, 1936, and effective July 1, 1937, after investigation into and concerning the matter of qualifications of employees and safety of operation and equipment of common carriers and contract carriers, adopted rules and regulations relating to safety of operation and equipment, which rules and regulations contain no prohibition with respect to the operation of equipment such as is contemplated within said Section 1033 (c) of Act No. 447 of the General Assembly of the Commonwealth of Pennsylvania."

Dismissed.

23. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "13", reading as follows:

> "13. Plaintiffs have filed "Grandfather Clause" applications with the Interstate Commerce Commission and with the Public Utility Commission of the Commonwealth of Pennsylvania pursuant to the Federal Motor Carrier Act, 1935."

Dismissed.

24. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "14", reading as follows:

> "14. Plaintiffs, intervenors, and others in interstate commerce over the highways of the Commonwealth of Pennsylvania are operating car-carrying equipment all or part of one of which carried cars is above the cab of the carrier or over the head of the operator of such carrier vehicle in conformance with the Motor Carrier Act, 1935, and the requirements, rules, and regulations of the Interstate Commerce Commission thereunder."

Dismissed.

25. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "15", reading as follows:

> "15. There are no Federal laws or orders, requirements, rules, and regulations of the In-

terstate Commerce Commission or of any other Federal body, board, or commission thereunder which prohibit the operation of the plaintiffs' vehicles in the manner presently operated in interstate commerce."

Dismissed.

26. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "16", reading as follows:

"16. Congress by statutory enactment and the Interstate Commerce Commission by orders, requirements, rules, and regulations now regulate transportation of property in interstate commerce with respect to safety of operation and equipment."

Dismissed.

27. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "19", reading as follows:

"19. When such equipment was purchased, its operation was not prohibited in Pennsylvania."

Dismissed.

28. Plaintiffs except to the failure and refusal of the learned chancellor to find that fact submitted by plaintiffs in their request at number "20", reading as follows:

"20. Removal of car over the cab or reconstruction or conversion of automobile transport-

ing vehicles would make them unsafe in operation over the highways."

Dismissed.

29. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "21", reading as follows:

> "21. By enforcement of said Section 1033 (c) plaintiffs, intervenors, and other automobile transporters will be deprived of the reasonable enjoyment of their property."

Dismissed.

30. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "22", reading as follows:

> "22. By enforcement of said section 1033 (c) plaintiffs, intervenors and other automobile transporters would be required to discontinue the operations of their vehicles."

Dismissed.

31. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "23", reading as follows:

> "23. By enforcement of said Section 1033 (c) plaintiffs, intervenors, and other automobile transporters would be required to discharge a large number of their employees."

Dismissed.

32. Plaintiffs except to the failure and refusal of

the learned chancellor to find the fact submitted by plaintiffs in their request at number "24", reading as follows:

> "24. Plaintiffs cannot re-route their traffic around the Commonwealth of Pennsylvania."

Dismissed.

33. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "25", reading as follows:

> "25. By enforcement of said Section 1033 (c), dealers and distributors of automobiles would be deprived of the use of their most effective, most economical and most prompt means of having automobiles transported from factory to their places of business."

Dismissed.

34. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "26", reading as follows:

> "26. By enforcement of said Section 1033 (c), plaintiffs, intervenors, other automobile transporters, employees, shippers, consignees, dealers, distributors, patrons and others will suffer immediate and irreparable damage."

Dismissed.

35. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "27", reading as follows:

"27. By enforcement of said Section 1033 (c), if plaintiffs, intervenors, and other automobile transporters are forced to discontinue their transportation of automobiles by truck, only a few carriers will be able to transport by the driveaway method pursuant to the Motor Carrier Act, 1935."

Dismissed.

36. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "28", reading as follows:

"28. Resultant diversion of automobiles now transported by trucks to transportation by the driveaway method following enforcement of said Section 1033 (c) will increase congestion of the highways of the Commonwealth of Pennsylvania."

Dismissed.

37. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "29", reading as follows:

"29. The fact that cars are carried partly or wholly above the cab of the carrier or over the head of the operator of such carrier vehicle has caused no accidents, contributed thereto or increased or aggravated injury either to persons or property."

Dismissed.

38. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by

plaintiffs in their request at number "30", reading as follows:

> "30. Vehicles carrying another vehicle any part of which is above the cab of the carrier or over the head of the operator of such carrier vehicle are as safe or safer than those not subject to prohibitions of said Section 1033 (e)."

Dismissed.

39. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "31", reading as follows:

> "31. Vehicles carrying another vehicle any part of which is above the cab of the carrier or over the head of the operator of such carrier vehicle have developed a smaller accident frequency than commercial motor vehicles hauling other commodities."

Dismissed.

40. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "32", reading as follows:

> "32. Safe operation of equipment hauling cars which are partly or wholly over the cab of the carrier is a matter of skill and experience of the driver."

Dismissed.

41. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by

plaintiffs in their request at number "33", reading as follows:

"33. Car-over-the-cab equipment does not constitute a hazard to the driver of the vehicle."

Dismissed.

42. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "34", reading as follows:

"34. View of highway is not affected by car being carried partly or wholly over the cab."

Dismissed.

43. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "35", reading as follows:

"35. The fact that a car is partly or wholly over the cab of the carrier makes the driver of the vehicle drive more carefully."

Dismissed.

44. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "36", reading as follows:

"36. Construction of car-over-the-cab equipment is sufficiently strong for safe operation."

Dismissed.

45. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by

plaintiffs in their request at number "37", reading as follows:

> "37. Character of highways of Commonwealth of Pennsylvania present no different operating condition nor greater safety problems for car haulers than for operators of other large equipment."

Dismissed.

46. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "38", reading as follows:

> "38. Safety of operation problems are same for any high truck."

Dismissed.

47. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "39", reading as follows:

> "39. There is no essential difference between operating problems of car- or other commodity-hauling equipment where the weight on the front wheels and the center of gravity are the same."

Dismissed.

48. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "40", reading as follows:

> "40. Other commercial motor vehicles have

overhead obstructions and carry cargoes over the cab."

Dismissed.

49. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "41", reading as follows:

"41. Practically none of the equipment now owned by the plaintiffs could be used legally under the present law."

Dismissed.

50. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "42", reading as follows:

"42. All of the equipment of the plaintiffs is legal in the states of New York, New Jersey, Maryland and Delaware."

Dismissed.

51. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "43", reading as follows:

"43. The plaintiff M. & G. Convoy, Inc., operated its model A and model E trucks a distance of 3,351,200 miles in a year with an accident frequency of .68, and its other type of trucks, a distance of 1,445,600 miles in a year with an accident frequency of 1.38, said accident frequency being the number of accidents occurring in 100,000 miles of operation."

Dismissed.

52. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "44", reading as follows:

> "44. The National Safety Council tabulation shows that the lowest of eighteen different general classifications in accident frequency is 2.02, that the average is 3.44, and that the highest is 6.46."

Dismissed.

53. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "45", reading as follows:

> "45. The cars are fastened down with four chains, one over each end of each axle, and bolted with turn-buckles so that the load is really part of the chassis."

Dismissed.

54. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "46", reading as follows:

> "46. The plaintiff M. & G. Convoy, Inc., has more accidents with the car carriers empty than when they are loaded, and plaintiff Maurer & Myers Auto Convoy had twenty accidents in a given period of time, two of which occurred while the carrier was loaded, and eighteen of which occurred while the carrier was operated empty."

Dismissed.

55. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "47", reading as follows:

> "47. The trucks of one extensive operator carrying cars partly over the cab have a better accident record than trucks of the same operator carrying general merchandise.

Dismissed.

56. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "48", reading as follows:

> "48. Car carried over the cab may be flattened out and completely wrecked without being knocked off the ramp or in any way affecting the ramp."

Dismissed.

57. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "49", reading as follows:

> "49. Moving the cab of a tractor forward so that it is not under a car, or under any part of a car, does not increase the safety of operation."

Dismissed.

58. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "50", reading as follows:

> "50. The vertical center of gravity of a car

carrying equipment is approximately 35% of the height."

Dismissed.

59. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "51", reading as follows:

"51. The vertical center of gravity of typical car-carrying equipment loaded is 50½ inches from the ground."

Dismissed.

60. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "52", reading as follows:

"52. The vertical center of gravity of an ordinary truck carrying a cargo only four feet in height even using a light stakerack body, is 50⅞ inches from the ground."

Dismissed.

61. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "53", reading as follows:

"53. When the car-carrying equipment is loaded normally, there is an up pull from the cars on the trailer relieving the front axle of from 1,000 to 500 pounds of weight. This compensates for the weight of the car over cab."

Dismissed.

62. Plaintiffs except to the failure and refusal of

the learned chancellor to find the fact submitted by plaintiffs in their request at number "54", reading as follows:

> "54. While an average ratio of 50% would permit an insurance company to break even, the loss ratio of plaintiff M. & G. Convoy, Inc., was only 17%. There is no increase in premium charge for auto carriers where all or a part of a car is carried over the cab. There is, however, an increase of 50% in premium charges against the long carriers so arranged that four cars may be carried entirely back of the cab."

Dismissed.

63. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "55", reading as follows:

> "55. The driver of a truck who drives to the left of the road to avoid scratching the car over the cab would have scratched the car following that although not over the cab. The driver of such equipment would have to pull to the left to avoid scratching the cars on the trees whether there was any car over the cab or not."

Dismissed.

64. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "56", reading as follows:

> "56. The accident known as 'The Erie Accident' was not caused by, nor damages aggra-

vated by, the presence of a vehicle over the cab of the carrier."

Dismissed.

65. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "57", reading as follows:

> "57. There is no record of a fully loaded car-carrying outfit upsetting going around any ordinary curve. With a tractor only (without a trailer) with the heaviest car, weighing 3,656 pounds, over the top of the cab, a safe speed on a curve with a 100-foot radius would be 25½ miles per hour."

Dismissed.

66. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "58", reading as follows:

> "58. A speed of 25½ miles an hour is as fast or faster than any truck, regardless of load, can be driven around a curve with a 100-foot radius, with safety."

Dismissed.

67. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "59", reading as follows:

> "59. The cracks in the frame requiring welding which were testified to by witness for defendant were caused by the operation of the

equipment empty and had no relationship to the carrying of a car over the cab."

Dismissed.

68. Plaintiffs except to the failure and refusal of the learned chancellor to find the fact submitted by plaintiffs in their request at number "60", reading as follows:

"60. All of the transportation rendered of all the plaintiffs is in interstate commerce."

Dismissed.

69. Plaintiffs except to the learned chancellor's first conclusion of law, which reads as follows:

"1. The act here complained of, Section 1033 (c) of the Vehicle Code as amended by Act No. 447, approved June 29, 1937, P. L. 2329, is not unconstitutional as a deprivation of property without due process, but on the contrary is a valid exercise of the police power of this Commonwealth."

Dismissed.

70. Plaintiffs except to the learned chancellor's second conclusion of law, which reads as follows:

"2. Section 1033 (c) is not unconstitutional as an unreasonable and invalid burden on interstate commerce, and does not discriminate against interstate commerce."

Dismissed.

71. Plaintiffs except to the learned chancellor's third conclusion of law, which reads as follows:

"3. Neither Congress, under the Motor Car-

rier Act of 1935, nor the Interstate Commerce Commission, has usurped the field of safety regulation of interstate motor carriers to such an extent as to remove the authority of the Pennsylvania Legislature to enact Section 1033 (c) affecting interstate commerce."

Dismissed.

72. Plaintiffs except to the learned chancellor's fourth conclusion of law, which reads as follows:

"4. The said act is not unconstitutional because of any deficiency in its title under Article III, Section 3 of the Pennsylvania Constitution."

Dismissed.

73. Plaintiffs except to the learned chancellor's fifth conclusion of law, which reads as follows:

"5. Haulaways with an automobile partially or completely over the cab are properly classified as the subject for State legislation designed to promote safety, such as Section 1033 (c).

Dismissed.

74. Plaintiffs except to the learned chancellor's sixth conclusion of law, which reads as follows:

"6. Plaintiffs by their pleadings and evidence, have not made out a sufficient case under the law to warrant the granting of injunctive relief by this court, and therefore the preliminary injunction heretofore granted should be

dissolved and plaintiff's bill dismissed at the costs of the plaintiffs."

Dismissed.

75. Plaintiffs except to the failure and refusal of the learned chancellor to make the conclusion of law submitted by plaintiffs, as follows:

"1. Section 1033 (c) of the Act of June 20, 1937, P. L. 2329, is invalid since the right of the State Legislature to prescribe such restrictions and prohibitions as to interstate commerce was superseded by the enactment by Congress of the Motor Carrier Act and by the action of the Interstate Commerce Commission in pursuance of the powers granted thereunder."

Dismissed.

76. Plaintiffs except to the failure and refusal of the learned chancellor to make the conclusion of law submitted by plaintiffs, as follows:

"2. The said statute is invalid since it constitutes a direct, unreasonable, and arbitrary burden on interstate commerce."

Dismissed.

77. Plaintiffs except to the failure and refusal of the learned chancellor to make the conclusion of law submitted by plaintiffs, as follows:

"3. The said statute is unconstitutional, illegal, and void since it is not justified under the police power of the Commonwealth and deprives the plaintiffs of their liberty and property without due process of law and without just compensation therefor."

Dismissed.

78. Plaintiffs except to the failure and refusal of the learned chancellor to make the conclusion of law submitted by plaintiffs, as follows:

> "4. The said statute is unconstitutional, illegal, and void because it violates the equal protection clause of the Constitution of the United States, and is special legislation of a type prohibited by the Pennsylvania Constitution."

Dismissed.

79. Plaintiffs except to the failure and refusal of the learned chancellor to make the conclusion of law submitted by plaintiffs, as follows:

> "5. The plaintiffs are entitled to injunctions as prayed for in their respective bills of complaint."

Dismissed.

80. Plaintiffs except to the failure and refusal of the learned chancellor to make the conclusion of law submitted by plaintiffs, as follows:

> "6. The costs of these proceedings are imposed upon the defendants."

81. Plaintiffs except to the learned chancellor's decree nisi, reading as follows:

> "And now, April 27, 1938, this case came before the Chancellor, testimony was taken and argument heard: it is therefore ordered, adjudged and decreed that the decree awarding a preliminary injunction to the plaintiffs is dissolved and the bill of complaint is dismissed at plaintiffs' cost. Unless exceptions be filed within thirty (30) days from the filing of this de-

cree a final decree will be awarded. The Prothonotary is directed to give notice to the attorneys for the parties hereto as to the filing of this decree.

Frank B. Wickersham
Chancellor"

Dismissed.

Respectfully submitted,

McNees, Hollinger & Nurick,
By Sterling G. McNees,
Attorneys for Plaintiffs.

VI.

FINAL DECREE

And now, September 6th, 1938, exceptions dismissed.

By the Court,

Frank B. Wickersham,
A. L. Judge.

(*Continued on page* 525a, *Volume II.*)